The British Sub-Aqua Club

NDC Diving Incidents Report

2005

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 2005 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 2005

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,
Derek Scrivener, Service Information Data Quality Supervisor,
Roger Aldham, Data and Statistical Analyst,
Royal National Lifeboat Institution

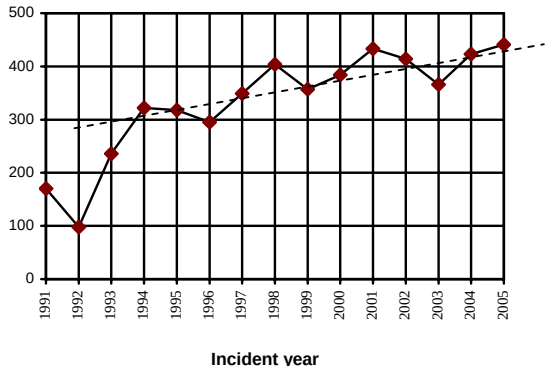
and, in particular, all of those divers and other sources who have taken the trouble to complete Incident Reports and share their learning experience with others.

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

Overview

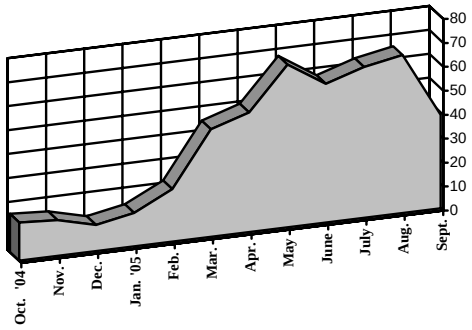
2005 has seen the highest ever number of UK incidents reported; a total of 441. The chart below shows the total of UK incidents reported annually over the last 15 years and it can be seen that, after a jump in the early 90s there has been a steady increase of about 11 incidents per year with perturbations of plus or minus up to 50 incidents per year around this trend line. It is not known if this increasing trend is the result of more incidents, more diving, better data capture or a combination of some or all of these factors.

Number of reported incidents



The distribution of reported incidents is shown in the following chart. As can be seen, 67% 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.

Monthly breakdown of all incidents - 2005



Incidents by category

The incident database categorises all incidents into one of nine major categories, and the following chart shows the distribution of the 2005 incidents into those categories.

The highest number of incidents (110) relate to 'Decompression Illness (DCI)' and this is consistent with previous years, although there does seem to be a decline from a peak of 144 in 2002. Many 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.

Last year I highlighted the rise in the number of incidents associated with abnormal ascents. This year's report contains 98 ascent related incidents, the highest number ever recorded and a 23% increase over the 2004 total, which was itself a record.

The following analysis reveals some of the issues:-

Basic nature of the report:-

81	Rapid ascents
28	Missed stops

Clearly some incidents relate to both the above

Causal factors are:-

17	Delayed SMB, mask, fin problem
12	Drysuit or BCD issues
11	Weight related issues
10	During training
9	Out of air
8	Regulator free flow

Again some have a combination of the above factors

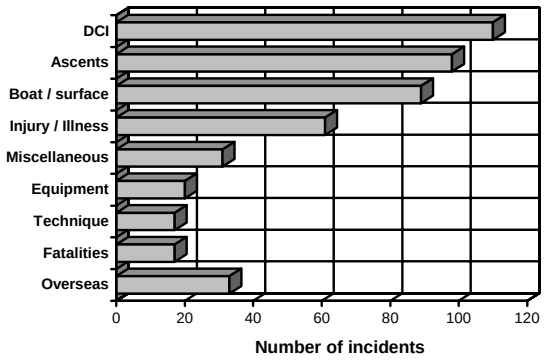
When all of the above causal factors are excluded 47 incidents (50%) remain where a simple loss of buoyancy control seems to have been the cause. Without any of the above perturbing factors being present divers have simply been unable to correctly control their rate of ascent. Poor training and lack 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 are the third largest category. Recent years have seen a decline in the number of these incidents from a maximum of 124 in 1998 and the 2005 numbers indicate a levelling out at just under 90. The decline in these incidents and the increase in 'Ascent' related incidents has displaced 'Boating and Surface' from its traditional second place.

Although the numbers are very low, this year saw a number of cases where divers were struck by boats and/or propellers; resulting in very serious injuries in one case and a very lucky escape in another.

Categorisation of all the year's incidents



Fatalities

17 fatal incidents occurred in the UK during the 2005 incident year. This is entirely in line with the average of 17.8 fatalities per year over the last ten years.
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 total seems to support this argument.
The 17 includes two double fatalities. 5 of the 17 were BSAC members.

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

- Two cases involved people who suffered a serious medical problem (typically a heart attack) whilst they were diving. There is a third case which may well 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 two cases divers were at the surface, in difficulties, but were unable to remain at the surface and sank before they could be recovered. Last year 8 out of the 25 fatalities were affected in this way.
- Four cases involved separation.
  In each of these cases the separation was not planned.
  Two cases involved three divers diving together. In one case the separated diver survived and the remaining two became one of the double fatalities. In the other case a problem arose during the ascent, two surfaced but the third did not.
  The third case involved a separation during an ascent where one of the divers did not make it to the surface.
- One case involved a hose failure which led to an out of air condition.
- Four cases involved solo diving. In each case they intentionally dived alone. One case involved a cave diver who became tangled in ropes. Two cases involved very deep dives; one to 60m and the other to 68m.
- Two cases involved divers running out of breathing gas.
  One was due to an equipment failure as defined above. The second was a result of divers going back into the water, after a dive, to recover lost equipment.
- Three cases involved rebreathers.

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

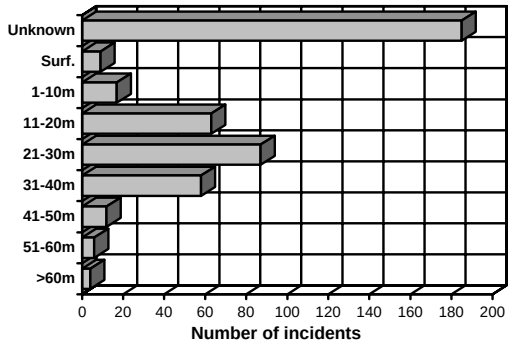
As stated above, four of the year's fatalities involved solo diving and to throw more light on these events I conducted a study of the database. The current database goes back to 1998 and it contains 138 fatal incidents (UK). 8 of these incidents involved double fatalities, giving a total of 146 deaths. Of this total, 19 relate to solo diving. This means that 13% of our fatalities were solo divers and we can be sure that this is very significantly higher than the fraction of dives that are conducted solo. People might be tempted to point at the double fatalities and argue that 8 lives would have been saved if the incidents had been solo dives. This may be true but every year we report a number of incidents where an attentive buddy has clearly saved another's life by taking the appropriate remedial actions. My guess is that these cases outnumber the double fatalities by a factor of five or more.

Finally there were three reported fatality overseas. Two cases involved the deaths of BSAC members. The third case involved BSAC members in the death of a non member.

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

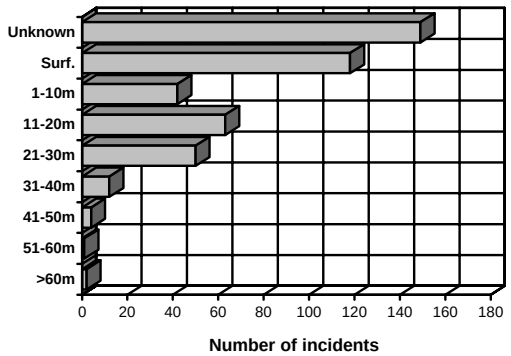


The pattern of depths in the 0m to 50m range is very similar to that normally seen and reflects the amount of diving that takes place in these depth ranges. The number of incidents reported in the greater than 50m range is 10, which is in line with previous years. However 2 of these 10 were fatal incidents, again indicating the risks associated with deep diving.

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 70m 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

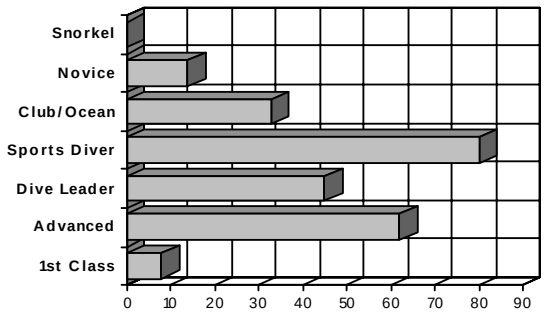


Inevitably the data are biased towards the shallower depths since many incidents happen during the ascent or at the surface. Critical among these are the DCI cases where almost always the casualty is out of the water before any problems are noted. This partially explains the large occurrence of 'Surface' 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.

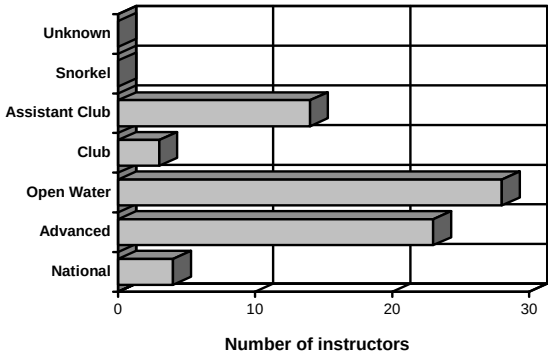
Qualification of the divers involved in incidents



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

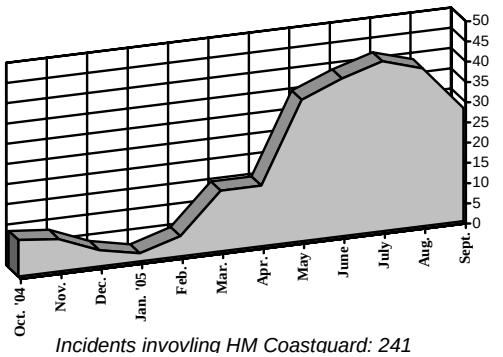


Divers' use of the Emergency Services

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 seem to be on a very gentle increase, having risen by about 40 cases during the last 8 years, an overall rise of about 20% in that time period.

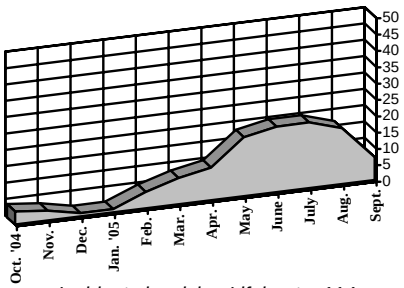
UK Incidents involving the Coastguard agency - Monthly breakdown



Incidents invovling HM Coastguard: 241

Our call upon the RNLI in the 2005 incident year is up from 2004, and incident numbers seem to have increased back to the level of those reported at the end of the 90s

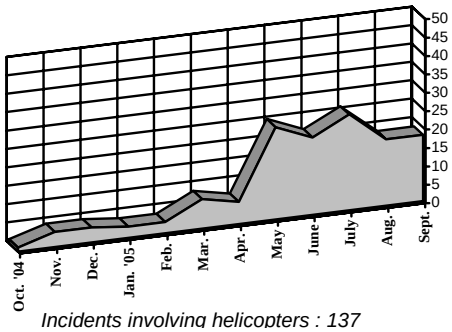
Divers' use of RNLI facilities by month



Incidents involving Lifeboats: 114

In 2005 137 incidents involve the use of helicopters, and this is the highest number recorded.
Helicopters are tasked to support searches for missing divers and to transport divers with DCI to recompression facilities. In the mid 90s helicopters were involved in about 20% of diving incidents; this number has steadily risen to about 35%. It is clear that we are seeing a general increase in the availability and use of helicopters for these tasks.

Divers' use of SAR helicopters by month



Incidents involving helicopters : 137

Decompression Incidents

The BSAC database contains 110 reports of DCI incidents in the 2005 incident year, some of which involved more than one casualty. When these multiple cases are counted the result is 120 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 2005 indicates the following major features:-

40 involved rapid ascents
30 involved diving to deeper than 30m
28 involved repeat diving
19 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 have not resulted in DCI.

Conclusions

Key conclusions are:-

- Reported incidents are in line with the trends of recent years.
- The number of fatalities is in line with the norms of previous years.
- Fatal incidents associated with solo and trio diving continue to feature.
- Incidents associated with abnormal ascents have risen 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 May 2002). This booklet summarises all the key elements of safe diving and is available to all, free of charge, 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

October 2004 05/001

Two divers were found unconscious at the bottom of a shotline by other divers. Shetland Coastguard received a call from dive support vessel reporting having two divers on the surface inert and unresponsive, the skipper also stating being unable to bring them aboard alone. Another vessel proceeded to the site, Shetland Coastguard requested launch of Longhope lifeboat. The lifeboat recovered the two divers and continued CPR until met by doctors, ambulances and Coastguard teams at the harbour. Both casualties pronounced dead on scene by doctor. (Coastguard, RNLI & Media reports).

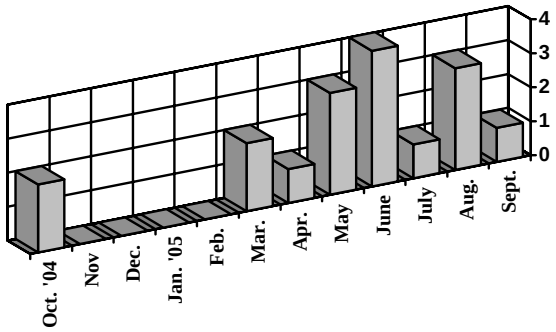
March 2005 05/074

A cave diver failed to return from a solo dive. Other divers later found his body tangled in ropes that were already in place. (Media report).

March 2005 05/041

A diver was engaged in a training course. Whilst entering the water from a beach he became unwell and then collapsed. Resuscitation techniques were applied but the casualty died. Initial reports suggest that the death was due to a heart attack.

UK Fatalities - Monthly breakdown from October 2004 to September 2005 incl.



April 2005 05/075

A diver became inverted at a depth of 6m and ascended feet first. He spat out his regulator. His buddy tried to replace it and to turn him the right way up. The buddy was pushed away. Another member of the group succeeded in righting the diver and he inflated his BCD. He was towed to the shore and given AV on the way. He was recovered from the water, the emergency services were called and resuscitation techniques were applied using oxygen and an automatic defibrillator. The casualty failed to recover. The cause of death was found to have been through drowning.

May 2005 05/093

Two divers finished a dive to 20m and were recovered into their boat. One of the pair stated that he had lost a delayed SMB and reel on the wreck and wanted to do a 'bounce' dive to recover it. He and his buddy re-entered the water and descended. One of the pair felt a restriction in his regulator because he was running low on air. He signalled to his buddy for air but the buddy indicated that he too was running out. They both surfaced after about 3 min, 20m apart and in distress. One was tangled in a line and out of air so the boat's skipper made for him first and he was recovered into the boat. The boat then moved to the second diver but just as they got to him he disappeared below the surface. An extensive search was conducted involving two lifeboats, a helicopter and other boats. The diver who had been recovered was taken to hospital and treated for shock. The body of the missing diver was found on the seabed six days later.

May 2005 05/095

Three divers conducted a dive in a quarry. They exchanged signals to ascend. One of the three became separated, surfaced, got out of the water and waited for his buddies to surface. Two sets of bubbles were seen but these turned out to be a different pair of divers. Later two rebreather divers found the two missing divers apparently lifeless at a depth of 34m. They were unable to lift the divers so they marked their location with delayed SMBs. The divers were recovered and resuscitation techniques were applied. They were taken to hospital where death was confirmed.

June 2005 05/096

A diver got into difficulties underwater and was brought to the surface. He was recovered into the boat unconscious and resuscitation techniques were applied. The Coastguard was alerted and a nearby warship offered assistance. The diver was recovered onto the warship and from there he was airlifted to hospital. He was pronounced dead on arrival. It is thought that he suffered a heart attack whilst underwater. (Media reports).

June 2005 05/102

A group of four divers dived on a wreck at a maximum depth of 60m, all using rebreathers with trimix. Although in the water together they conducted their dives separately. After 60 min, one diver was seen by another to be recovering a porthole. The porthole was later found at the surface under the diver's lifting bag. Three divers surfaced having completed over 150 min decompression on a trapeze. The diver who had been seen with the porthole did not surface and the alarm was raised when he was 15 min overdue. A search was initiated involving two lifeboats, two helicopters, a warship and other vessels. The missing diver was not found.

June 2005 05/135

A diver conducted a dive on a wreck to a maximum depth of 68m using a rebreather. He dived alone although others from his party were in the water at the same time. He was last seen hovering motionless above the wreck. He failed to surface and an extensive search involving aircraft was made. His body has not been recovered.

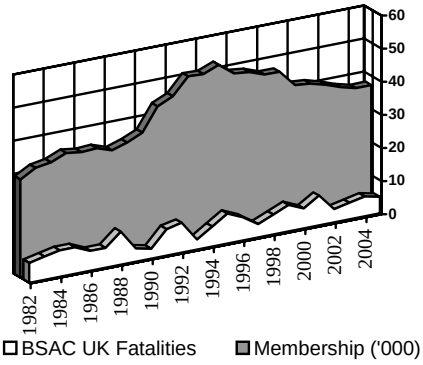
June 2005 05/136

A diver entered the water alone. His body was later spotted, motionless, at the surface by a passing fisherman. The diver was recovered by a lifeboat but resuscitation attempts failed.

July 2005 05/158

An instructor and two students were engaged in a training course to a maximum depth of 28m. At the end of the dive they were ascending the shotline when one of the trainees showed some distress and grabbed for the second student's octopus regulator. The instructor's mask was displaced and the second student inflated her BCD taking the instructor with her to the surface. The trainee who had the initial problem was seen to slip off the shotline and drop from view. The instructor and student who had surfaced were airlifted to a recompression facility for precautionary treatment. An extensive search was carried out for the missing diver involving two lifeboats, two helicopters and naval and civilian divers but he was not found.

BSAC Fatalities against membership 1982-2005 (UK fatalities only)



August 2005 05/187

A pair of diver were ascending from a dive to a maximum depth of 29m. During the ascent they became separated and one of the pair failed to surfaced. An extensive search involving aircraft, surface vessels and divers was conducted but the missing diver was not found. (Coastguard & RNLI reports).

August 2005 05/191

Two divers conducted a buddy check, entered the water and commenced their descent. At about 7m the descent rate of one of the divers started to increase. His buddy followed at a slower rated but keeping him in sight. The first diver hit the bottom at a depth of 25m and the second diver settled beside him. The first diver was trying to reconnect his drysuit direct feed hose. He made several unsuccessful attempts and then signalled for his buddy to assist. The buddy also made several unsuccessful attempts to reconnect the hose. Then there was a loud noise and the hose began to thrash around filling the water with bubbles and reducing visibility. The heavy diver was able to signal 'out of air' and he took his buddy's regulator. He was breathing very heavily and the buddy tried to signal to him to calm him and to initiate an ascent. The buddy tried to stop the bubbles by doubling the hose but this did not work. The buddy placed his second regulator in his mouth and took hold of the troubled diver. They started their ascent in a mass of bubbles. Suddenly the troubled diver stopped moving and the pair sank back to the seabed with the buddy being pulled downwards in a position above the other diver. On the seabed the buddy fully inflated his own BCD and they made a rapid ascent to the surface. At the surface the buddy struggled to support the other diver, who was not breathing. He removed both weight harnesses and started to give the casualty AV. He shouted for help and another boat came to assist. The casualty was recovered into the boat. The buddy also got into the boat and he and another diver administered oxygen enriched AV and CPR to the casualty. The Coastguard was alerted and the boat returned to shore. Resuscitation techniques were continuously applied. They were met by a doctor and an ambulance. The casualty was declared to be dead. The buddy was airlifted to a recompression facility for precautionary recompression treatment. He suffered no ill effects.

August 2005 05/203

A diver surfaced alone from a wreck dive with a maximum depth of 30m. He was seen holding on to his SMB and with his face mask removed. As the boat turned to pick him up he sank below the surface and did not reappear. The Coastguard was alerted and an extensive air and sea search was made. Underwater searches were also made using sonar and divers. The missing diver was not found. (Coastguard & RNLI reports).

September 2005 05/214

A rebreather diver completed an 80 min dive to 46m including the following stops; 2 min at 35m, 2 min at 28m, 2 min at 19m, 5 min at 9m and 25 min at 6m. During the ascent he felt sick and had to switch to his bail out regulator so that he could be sick underwater. He got water in his mask and he swallowed this water. He requested help to get back in the boat and was sick again. He drank some tea and vomited again. He complained of feeling unwell. He sat down and breathed enriched air from his rebreather. He then became incoherent and collapsed. The Coastguard was alerted and the diver was placed on oxygen. The diver was airlifted to hospital where he died four days later.

Decompression Incidents

October 2004 05/314

Humber Coastguard received a call from dive support vessel reporting having a diver aboard suffering from suspected DCI. Following a medi-link call RAF rescue helicopter R-131 was scrambled airlifting the casualty to recompression chamber for treatment. (Coastguard report).

October 2004 05/317

Clyde Coastguard received a call from diver suffering from suspected DCI whilst on way to catch a car ferry. The hyperbaric chamber was contacted with Largs Coastguard making sure the casualty safely arrived at the chamber. (Coastguard report).

October 2004 05/319

Shetland Coastguard received a call from dive support vessel requesting assistance for a diver aboard suffering from suspected DCI. Vessel met by ambulance, to recompression chamber for treatment. (Coastguard report).

October 2004 05/320

Clyde Coastguard received a call from dive support vessel reporting having two divers aboard suffering from suspected DCI. Following medical advice, the divers were taken by lifeboat to shore where they were transferred to an ambulance and transported to hospital for treatment. (Coastguard & RNLI reports).

November 2004 05/025

Two divers commenced a dive. One of the pair had only used a drysuit twice before. At 4m, this diver had difficulty descending and the other diver assisted by adding rocks to her BCD. They reached a maximum depth of 25m and then started to ascend. 17 min into the dive, at a depth of 18m, the BCD inflator valve of the diver who had had buoyancy problems stuck and the diver became buoyant. Her buddy came to her assistance and they settled onto the seabed. The inflator valve stuck a second time and they were unable to disconnect the hose. Both divers made a rapid, buoyant ascent to the surface. Their total dive time was 22 min. Once on shore, the diver who had been buoyant complained of breathlessness and feeling weak. The buddy was symptom-free. The Coastguard was alerted and medical advice was sought. The diver was airlifted to a recompression chamber for treatment. Her symptoms were fully resolved.

November 2004 05/026

A trainee diver who was involved in a drysuit training course conducted a 30 min dive to a maximum depth of 6m. 1 hour later he dived again. At 22m he lost control of his buoyancy and made a rapid ascent to the surface. He was placed on oxygen for a while. A day later he experienced problems and received recompression treatment for a cerebral DCI.

November 2004 05/027

Two divers conducted a dive to a maximum depth of 19m. One of the pair was using nitrox 36, the other was using air. During the dive the nitrox diver suffered a slight loss of buoyancy control and ascended 5m. She quickly corrected this problem and re-descended. After 30 min they made their ascent using a shotline. They completed a 5 min stop at 6m and then left the water. Their total dive time was 36 min. Later that evening the nitrox diver began to feel lethargic. A little later her left arm started to ache. She initially thought that it was a muscle strain, but the condition worsened. She breathed from her nitrox 36 supply and the condition improved. She sought medical advice and travelled to a recompression facility. On the way her condition deteriorated; she developed 'pins and needles' in both arms and over the cheek bones in her face, and she had difficulty focusing. She was placed on oxygen. She received a series of three recompression treatments and she was left with minor residual symptoms which were considered to have been from tissue damage. She was advised to seek a PFO test.

November 2004 05/325

Clyde Coastguard received a call from ambulance control to assist at the Helo landing site for Helimed 5 to land a diver suffering from suspected DCI for transfer to a recompression chamber for treatment. Casualty was finally transferred by land, Cumbrae Coastguard team stood down. (Coastguard report).

December 2004 05/326

Brixham Coastguard maintained a communications watch over RAF rescue helicopter as it flew a diver from an inland site to DDRC Plymouth for treatment following a dive where he developed suspected DCI. (Coastguard report).

December 2004 05/029

A diver was participating in a nitrox training course. He completed a dive to 14m for 23 min with a 5 min stop at 9m and a 5 min stop at 6m. His dive gas was air and he used nitrox 40 for decompression. During the decompression stops he practiced gas switching. 2 hours 20 min later he dived to 16m for 23 min and completed the same decompression process. The following day he made an aircraft flight. 1 hour after the flight, 15 hours 30 min after his last dive, he developed pains in his neck and shoulders and a tingling in his arms and hands. These symptoms persisted for three days and he then flew back home. He sought medical advice and was referred to a recompression facility. He received recompression treatment and his symptoms resolved. The following day the symptoms returned, he received two further sessions of treatment and his symptoms were finally resolved. He had suffered a previous, suspected DCI, four months earlier which had resulted in a neck injury and this was thought to have contributed.

December 2004 05/016

A diver dived to 39m. Later the same day he made a second dive to a maximum depth of 20m. Shortly after this second dive he complained of chest pains and 'pins and needles' in his legs. The diver was placed on oxygen and the Coastguard was alerted. The boat returned to shore and the diver was airlifted to a recompression facility. He received three sessions of recompression treatment and was experiencing difficulties walking.

December 2004 05/034

Two pairs of divers conducted a dive together. One pair waited while the second pair moved down to 35m and they then started an ascent together, moving up a sloping bottom contour. At 24m one of the divers lost control of her drysuit buoyancy and started a buoyant ascent. Her buddy went with her. The second pair also made an ascent. At 6m they found the buddy of the buoyant diver; his computer indicated that a 4 min stop was required. The second pair had less than 1 min

decompression and when this had cleared one surfaced and the other stayed with the buoyant diver's buddy. At the surface the diver from the second pair found the buoyant diver; her computer indicated that a 4 min stop had been missed. She was assisted from the water and placed on oxygen. After 15 min she developed pain in her back and legs and started to feel nauseous. The emergency services were alerted and she was airlifted to a recompression facility for treatment.

January 2005 05/036

Three divers conducted a dive to a maximum depth of 23m. At 20m one of the three experienced a problem with her regulator. She attempted to breathe from the alternative air source of one of the other divers but couldn't get air. These two divers made a rapid ascent to the surface. The third diver made a normal ascent. The two who had made the rapid ascent were in distress at the surface. They were recovered from the water and placed on oxygen. The diver who had been out of air was airlifted to a recompression facility. The other two were taken by ambulance to hospital. The diver who had made the normal ascent was discharged but the one who had made the rapid ascent was transferred to the recompression facility. Both divers who had made the rapid ascent were successfully treated. It was later discovered that the diver who had had breathing difficulties had no air in her cylinder and that the pony cylinder of the buddy from whom she had attempted to take the alternative air source was switched off.

January 2005 05/046

A diver conducted a dive to 15m for 21 min with a 3 min stop at 6m. 4 hours 1 min later she dived to 33m for 24 min including a 1 min stop at 12m, a 1 min stop at 9m and a 4 min stop at 6m. 19 hours 7 min later she dived to 21m. At this depth she experienced a 'spinning' sensation. She signalled to her two buddies that she wanted to ascend. She made a rapid ascent to the surface missing a planned stop at 6m. One buddy came with her and the other made a normal ascent. Her dive duration was 2 min 20 sec. She felt disorientated after the dive. The following day she had a tingling and numbness in her right hand and sore elbows and shoulders. She felt tired and sick and she had a headache. She sought advice from a hyperbaric facility and attended for treatment. DCI was diagnosed and a burst eardrum was suspected. She received two sessions of recompression treatment. Neither buddy suffered any ill effects.

January 2005 05/048

Two divers planned a dive to 50m. At this depth one of the divers believes that he experienced nitrogen narcosis. He suggested to his buddy that they descend to 60m which they did. They spent 1 min at 60m and then began their ascent. They conducted the following stops - 2 min at 28m, 2 min at 18m, 2 min at 9m and 23 min at 6m as indicated by their computers. On leaving the water one of the divers experienced difficulties. The emergency services were called and he was taken to hospital and then to a recompression facility where he was treated for DCI.

February 2005 05/042

A diver conducted a 60 min dive to 60m using trimix 19/35. The dive time included a total of 27 min of stops which were made at depths between 39 and 6m using nitrox 36 and nitrox 75. 3 hours later he developed a migraine headache. He began to feel nauseous and to vomit. He sought medical advice and was taken, on oxygen, by ambulance, to a recompression facility. He received a 9 hour treatment which fully resolved his symptoms.

February 2005 05/051

Two divers conducted a dive to a maximum depth of 20m. At this depth one of the pair wanted to cough and he removed his regulator to do so. The regulator then began to free flow. He attempted to use his pony regulator and his buddy turned his main air supply off and then on again, which stopped the free flow. The diver then reached for his inflation unit. His buddy thought that he was about to make a rapid ascent and she managed to control him. They made a normal ascent to 15m but at this point the ascent rate began to rise. The panicked diver made a rapid ascent from 10m to the surface. His dive duration was 14 min. His buddy made a normal ascent. 20 min later, the diver who had made the rapid ascent started to feel pain in his hip and knee, and a tingling in his hand. He had had a headache prior to the dive and had taken Panadol. He was placed on oxygen. His condition did not improve and he was taken by helicopter to a recompression facility where he received recompression treatment. He was discharged the following day.

February 2005 05/061

Two divers conducted a dive to a maximum depth of 35m. They started their ascent and, at a depth of 30m, the fin of one of the divers came off. This caused him to lose control of his buoyancy. At 20m he removed his weightbelt and managed to control his ascent to about 12m. At this point he lost buoyancy control and made a fast ascent to the surface. His dive duration was 18 min. Later he experienced a tingling in his right thigh. He was placed on oxygen which initially improved his symptoms. He then developed a problem with his right shoulder. An ambulance was called and the diver was airlifted to a recompression chamber for treatment. He is believed to have made a full recovery.

February 2005 05/062

Two divers completed a 27 min dive to 20m with a 3 min decompression stop at 5m. During the last few minutes of the dive one of the pair began to feel cold. Shortly after leaving the water, she started to feel dizzy. Her buddy helped her to remove her kit and she was placed in the recovery position. She was very cold and disorientated. She was placed on oxygen and wrapped up to prevent further heat loss. She was taken by ambulance to hospital and from there to a recompression facility where she received three sessions of treatment. She made a full recovery.

March 2005 05/078

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

March 2005 05/080

A diver conducted a dive to a maximum depth of 43m for a duration of 18 min including a 2 min stop at 6m. After a surface interval of 2 hours 12 min he dived to 30m for 27 min including a 1 min stop at 5m. Back on the boat the diver complained of a lower back pain; he thought that he had strained a muscle climbing the ladder. The pain worsened and he was placed on oxygen. The Coastguard was alerted. 5 min later the casualty had lost feeling in the top of his right leg. The casualty was airlifted to a recompression facility for treatment and released the following day.

March 2005 05/288

A diver conducted a dive to 14m. 4 hours 30 min later she dived to 14m for 27 min with a 1 min safety stop at 3m. 19 hours later she dived to 22m. After about 13 min she felt air migrate into the feet of her drysuit and then her right foot was pulled from the boot. Shortly afterwards the same thing

happened to her left foot. She then lost control of her buoyancy and made a rapid ascent to the surface hitting the underside of the boat. Her buddy made a normal ascent. The buoyant diver was recovered into the boat. She complained of pain in her right shoulder and nausea. She was placed on oxygen and the Coastguard was alerted. She was airlifted to a recompression facility where she was treated for a suspected neurological DCI. She was discharged later that night.

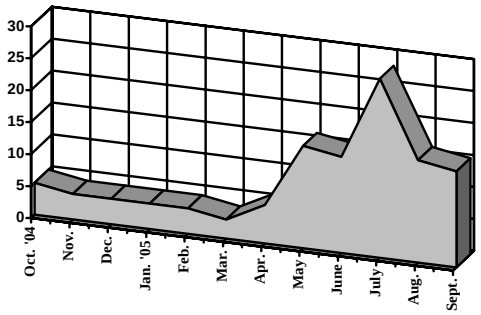
April 2005 05/342

Brixham Coastguard received a call from dive support vessel reporting a diver aboard suffering from suspected DCI, the casualty was airlifted by Coastguard rescue helicopter to recompression chamber for treatment. (Coastguard report).

April 2005 05/345

Solent Coastguard received a call from dive support vessel reporting having a diver aboard suffering from suspected DCI. The casualty was airlifted by Coastguard helicopter to QAH for treatment, the incident also attended by Littlehampton and Portsmouth Coastguard teams. (Coastguard report).

Decompression incidents by month



April 2005 05/111

A diver and an instructor descended to a depth of 30m. The diver indicated that he was unhappy and they started to ascend. During the ascent the diver lost his regulator and made a very rapid ascent to the surface. His dive duration was 9 min. He was recovered from the water. He lost consciousness, had a weak pulse and his pupils were unresponsive. He was placed on oxygen and airlifted to a recompression facility. He received recompression treatment for DCI and was released, fully recovered, later the same day.

April 2005 05/215

A diver completed a 34 min dive to 28m followed, 5 hours 12 min later, by a 30 min dive to 17m. The following day he dived to 22m for 33 min with a 2 min safety stop at 6m. About 12 hours later he noticed itching and 'pins and needles' down his back. During the night the condition worsened and spread across his back. The next morning he sought medical advice and received recompression treatment that resolved his symptoms. Repetitive diving and dehydration were thought to have been contributory factors.

April 2005 05/112

An instructor and a trainee conducted a 40 min dive to 17m. 16 hours later they dived to a maximum depth of 17m. Towards the end of the dive, the instructor demonstrated the deployment of a delayed SMB. During deployment the reel jammed and the regulator being used for fill the SMB started to free flow. Before he could release the reel the instructor was dragged upwards. The trainee hung on to the instructor and both started to ascend. The trainee then let go of the instructor but both were carried buoyantly to the surface. Their dive duration was 40 min. Both were recovered into their boat and placed on oxygen. Shortly afterwards the trainee began to complain of visual disturbances. The Coastguard was alerted and the divers were airlifted to a recompression facility where they both received treatment. Both made a full recovery.

April 2005 05/257

A diver conducted a 32 min dive to a depth of 27m with a 1 min stop at 6m. 4 hours later he dived to 28m for 48 min with an 8 min stop at 6m using nitrox 50. Shortly after the second dive he felt a pain in his elbow. He was placed on oxygen for 10 min, switched to nitrox 50 for 10 min, back to oxygen for 20 min until it ran out, then back to nitrox 50. The diver had no other symptoms of DCI. Medical advice was sought and it was determined that there was a lifeboat in the area with another diver with DCI and a doctor on board. The lifeboat was tasked to collect the diver who was placed on oxygen and taken ashore. He was taken to a recompression facility. His symptoms had resolved. It was decided that he should receive precautionary recompression treatment with the other diver who had been on the lifeboat. He experienced no further problems.

May 2005 05/259

A diver dived to 14m for 30 min with a 2 min stop at 6m. 2 hours later she dived to 14m again. After 20 min she became cold and the diver and her buddy decided to terminate the dive. The buddy settled on the seabed and prepared a delayed SMB. While he did so the other diver started to rise to the surface. When the buddy realised that she had started her ascent he made himself buoyant to catch her up. By the time he caught up with her and had controlled their buoyancy they were at the surface. Two days later the diver complained of 'pins and needles' in her fingers and joint pains. Medical advice was sought and the diver was taken to a recompression facility. She received two sessions of recompression therapy and her symptoms were fully resolved.

May 2005 05/123

A pair of divers dived to 30m. One of the pair began to feel very uncomfortable and indicated that she wanted to ascend. She then began a rapid ascent; her buddy followed. Their dive duration was 23 min. At the surface the diver who had started the rapid ascent felt unwell and was placed on oxygen. Her condition worsened and the emergency services were alerted. She was airlifted to a recompression facility. Later her buddy also began to feel unwell and he made his own way to the recompression facility. Both divers received two sessions of recompression treatment for DCI.

May 2005 05/355

Dive support vessel reported having two divers aboard suffering from suspected DCI following a rapid ascent 16m after a dive to 32m. Both divers taken to DDRC for treatment. (Coastguard report).

May 2005 05/091

Two divers descended a shotline to a wreck. They swam to the end of the shotline to tie a lifting bag to the grapple to aid recovery. Visibility and light levels were low due to plankton. They reached a maximum depth of 32m. The lead diver then became tangled in mono-filament fishing net and lines that were covering part of the wreck. He was unable to free himself and started to panic. His buddy came to his aid and was eventually able to cut him free. The diver had been trapped for 12 min. He had inflated his BCD and drysuit whilst trapped and once free he started a buoyant ascent. He was able to slow the ascent at 20m. He looked for his buddy but could not see him. He then made a normal ascent with a safety stop at 3m. The buddy had also become tangled in the lines and was unable to free himself so he removed his diving cylinders and after inflating his drysuit, he made a free ascent directly to the surface, where he arrived before his buddy. At the surface he was able to give an emergency signal and he was recovered into a boat. He was semiconscious. He was placed on oxygen and the Coastguard alerted. The buddy surfaced safely a few minutes later. Both divers were airlifted to a recompression facility where treatment for DCI was given.

May 2005 05/354

Dive support vessel reported having a diver aboard suffering from suspected DCI following a dive to 32m. Casualty and buddy airlifted to DDRC for treatment. (Coastguard report).

May 2005 05/122

Two divers conducted a dive to a maximum depth of 27m. They started their ascent and, at a depth of 25m, one of the pair attempted to release air from his drysuit but was unable to prevent a rapid ascent. He was able to stop at 3m for 2 min but then he surfaced. His dive duration was 27 min. His buddy made a normal ascent. The buoyant diver was recovered from the water and placed on oxygen and the Coastguard was alerted. Once ashore he was taken by ambulance to a recompression facility where he was treated for DCI.

May 2005 05/129

A diver conducted a 30 min dive to a depth of 18m using nitrox 34. One hour later he developed a pain in his forehead, vision problems and a tightness in his chest. He was placed on oxygen and transferred by helicopter to a recompression facility where he was treated for suspected DCI.

May 2005 05/133

A diver conducted a 40 min dive to a maximum depth of 25m with a 3 min safety stop at 6m. 2 hours 11 min later she dived to a maximum depth of 25m. During this dive she began to feel buoyant as she swam up a slope. She tried to dump air from her cuff dump and a few bubbles came out. She soon felt buoyant again and she removed her drysuit direct feed hose in case the inflation valve had become jammed. She again dumped a little air from her cuff dump. She checked to make sure her BCD was empty which it was. She and her buddy decided to abort the dive. The buddy deployed a delayed SMB and they started their ascent. The buoyant diver was unable to control her ascent and rose, at an increasingly fast rate, to the surface. She was recovered into the boat and placed on oxygen. Her buddy made a normal ascent including safety stops. As the boat neared the shore the diver who had made the rapid ascent began to feel a slight tingling sensation in her left hand and arm. The Coastguard was alerted and the diver was airlifted to a recompression facility. Recompression treatment did not resolve the symptoms. The symptoms resolved, in hospital, overnight and the diver was released the following day after a second recompression treatment. It is thought that the diver's undersuit blocked the dump valve.

May 2005 05/359

Dive support vessel contacted Stornoway Coastguard reporting having a diver aboard suffering from suspected DCI. A medi-link call was established. Coastguard rescue helicopter R-MU was scrambled to airlift casualty to a recompression chamber for treatment, being met by Oban Coastguard team and a waiting ambulance. (Coastguard report).

May 2005 05/362

Dive support vessel contacted Portland Coastguard reporting having two divers aboard who had made a rapid ascent and were suffering from suspected DCI. The divers were airlifted from the vessel and transferred to a waiting ambulance by Poole Coastguard rescue team for onward transportation to recompression chamber for treatment. (Coastguard report).

May 2005 05/369

Dive support vessel contacted Portland Coastguard by telephone reporting having a diver aboard having made a rapid ascent and was showing signs of DCI. Rescue helicopter R-WB was tasked to airlift the casualty and buddy from the vessel to a recompression chamber for treatment, Poole Coastguard manned the HLS. (Coastguard report).

May 2005 05/372

Dive support vessel called Falmouth Coastguard on VHF reporting having a diver aboard suffering from suspected DCI following a dive to 36m. Falmouth Coastguard tasked RN rescue R-193 and Penzance Coastguard team, the casualty and buddy were airlifted to DDRC Plymouth. (Coastguard report).

May 2005 05/373

Dive support vessel called Portland Coastguard reporting having a diver aboard with suspected DCI, medical advice had already been sought and the doctor had recommended evacuation. Portland Coastguard tasked Coastguard rescue helicopter R-WB to airlift the casualty to a recompression chamber for treatment. the HLS was manned by Poole Coastguard team. (Coastguard report).

May 2005 05/146

30 min after a 21 min dive a diver complained of soreness and numbness on his right hand side. He was placed on oxygen and the Coastguard was alerted. A lifeboat was launched to assist. (Coastguard & RNLI reports).

May 2005 05/228

Two divers conducted a dive to a maximum depth of 30m. After 25 min both divers prepared to ascend. One of the pair deployed a delayed SMB and they started their ascent after 28 min. The diver with the SMB lost control of his buoyancy and ascended quickly to the surface. The other diver managed to complete 6 min of stops between 6 and 3m, but had exceeded the recommended ascent rate. The first diver was recovered into the boat and placed on oxygen. The Coastguard was alerted and once other divers had been recovered the boat returned to shore. The first diver was taken by ambulance to a recompression facility where he was treated twice for DCI. It was later found that weight was missing from the integrated weight system of his BCD. It is thought that this had been lost during the dive, leading to his rapid ascent.

June 2005 05/374

Dive support vessel contacted Portland Coastguard on VHF channel 16 reporting having a diver aboard suffering from a skin rash, the dive support vessel had medical advice which recommended an airlift to recompression chamber. Coastguard helicopter R-WB was tasked to evacuate the diver. The helicopter was met by a doctor and Poole Coastguard for transportation by ambulance to the recompression chamber. (Coastguard report).

June 2005 05/376

Stornoway Coastguard received a call from a diver who was experiencing problem associated with DCI following a dive to 22m, the diver was airlifted to recompression chamber by Coastguard rescue helicopter R-MU, with Broadford & Portree Coastguard teams assisting. (Coastguard report).

June 2005 05/137

Dive support vessel contacted Stornoway Coastguard reporting having a diver aboard suffering from suspected DCI. Coastguard rescue helicopter R-MU was tasked to airlift the casualty to recompression chamber for treatment. (Coastguard report).

June 2005 05/378

Brixham Coastguard received a call from a diver reporting one of the party was suffering from suspected DCI following a dive to 34m. Casualty was met by ambulance and Hope Cove Coastguard then airlifted by RAF rescue helicopter R-169 to DDRC Plymouth for treatment. (Coastguard report).

June 2005 05/381

Dive support vessel reported having a diver on shore who was feeling dizzy and having had problems clearing ears following a dive to 34m, the diver was airlifted to DDRC Plymouth for treatment. (Coastguard report).

June 2005 05/377

Clyde Coastguard received a call from dive support vessel reporting having a diver aboard who had made a rapid ascent to the surface following loss of weigh belt, the casualty was transferred to hospital and later on to hyperbaric chamber for treatment for DCI. (Coastguard & RNLI reports).

June 2005 05/153

A diver conducted a dive to 31m for 40 min with a 3 min safety stop at 6m. 1 hour 47 min later he dived to 22m for 40 min with a 3 min safety stop at 6m. Once back on the boat the diver felt as if he had pulled a muscle in his arm. Later that evening the pain got much worse and he sought advice from a recompression facility. A 'mixed neurological and limb' DCI was diagnosed. He received a series of four recompression treatments over the next three days. He was left with some numbness in his elbow and has followed advice to stop diving.

June 2005 05/383

Forth Coastguard received a call from dive support vessel reporting having a diver aboard suffering from suspected DCI, following a dive to 23m when a rapid ascent was made during the ascent from 14m. The casualty was met by ambulance and Eyemouth Coastguard, casualty was assessed and it was decided to airlift the patient to recompression chamber by Heli-med rescue helicopter. (Coastguard report).

June 2005 05/160

A diver conducted a 24 min dive to a depth of 5m. 41 min later he dived to 35m. During this second dive he ascended to 25m and then re-descended to 35m. He then rose to 22m from where he ascended to the surface in 2 min. Once out of the water he complained of feeling unwell and he had backache. He was placed on oxygen and taken to hospital from where he was discharged during the night. He awoke the following morning feeling unwell, unable to walk and with urinary retention. He went to hospital and from there to a recompression facility where he received extensive treatment over a period of twelve days.

June 2005 05/391

Solent Coastguard received a call from dive boat reporting having a diver aboard suffering from suspected DCI, the casualty was taken to QAH by ambulance for treatment. (Coastguard report).

June 2005 05/388

Falmouth Coastguard received a 'Mayday' call on VHF channel 16 reporting a diver onboard suffering from suspected DCI following a rapid ascent from 65m, missing 45min of stops. Falmouth Coastguard tasked RN rescue helicopter R-193 to airlift the casualty to DDRC Plymouth. (Coastguard report).

June 2005 05/166

A diver completed a dive to 23m for 40 min with a 3 min stop at 6m. 5 hours 35 min later he dived to 13m for 34 min with a 3 min stop at 6m. 16 hours 35 min later he dived to 20m for 42 min with a 2 min stop at 15m and a 3 min stop at 6m. He was woken early the following morning by a dull pain in his right shoulder. He took a pain killer and went back to bed. He woke later with a pronounced pain in his right shoulder and a slight pain in his right elbow. He also had a weakness in his right hand and decreased reflexes in his right arm. His pain improved when he breathed nitrox 50. He sought medical advice and was diagnosed with a neurological DCI. He received two sessions of recompression treatment.

June 2005 05/167

A rebreather diver suffered paralysis in both legs. She received recompression treatment.

June 2005 05/188

Three divers entered the water and commenced their descent down a shotline. One diver moved ahead of the others. At 22m he realised that the other two were not following him and he re-ascended to meet them at about 10m. One of the other divers then started to descend when the third diver indicated that he was having problems clearing his ears and was going to abort the dive. This diver ascended on his own and the other two continued the dive. They met on the bottom at a depth of 26m. They swam to a wreck at a maximum depth of 28m. One of the pair experienced buoyancy control problems and held on to the wreck on occasions trying to dump air from his suit. They deployed a delayed SMB to make their ascent and whilst doing so the buoyant diver lost control and was carried to the surface. The buoyant diver's SMB had a small weight attached and he felt that the loss of this weight which he sent up with the buoy caused him to finally lose control of his buoyancy. He was recovered into the boat and placed on oxygen. His buddy ascended as fast as his computer would allow. The Coastguard was alerted and the boat returned to shore. The diver who had made the rapid ascent was taken by ambulance and helicopter to a recompression facility for treatment for DCI.

June 2005 05/168

A diver using nitrox 30 completed a 36 min dive to 36m including a 5 min stop at 6m and a 1 min stop at 3m. Shortly after re-boarding the boat he complained of an ache in his left shoulder. This persisted and he was placed on oxygen. He had a blotchy red rash on his shoulder which faded when the oxygen was administered. Medical advice was sought and the Coastguard was contacted. The diver was airlifted to a recompression facility. He received treatment that resolved his symptoms. His buddy suffered no ill effects.

July 2005 05/308

Three divers descended a shotline and conducted a dive to a maximum depth of 33m. After 17 min they began to re-ascend, back up the shotline. They completed a safety stop at 6m and then surfaced. Their dive duration was 28 min of which 11 min was the ascent. The following day one of the three developed a headache and began to feel nauseous. During the night he awoke suddenly with his head pounding. He went back to sleep. When he awoke in the morning his headache was still there and he began to develop a slight tingling in his right arm and waves of dizziness. He sought medical advice, saw his doctor and was taken to hospital. The diver was starting to feel very confused and had muscle fatigue. The doctors rejected his suggestions that he might be suffering from DCI and he was given analgesic drugs. He was kept in hospital overnight and the following day his wife rang a recompression facility and sought diving medical advice. They advised that he attend a recompression facility, which he did. He received three sessions of recompression treatment for DCI and made a full recovery.

July 2005 05/406

Portland Coastguard received a call from dive support vessel reporting having a diver aboard suffering from suspected DCI, the casualty was airlifted from the vessel by Coastguard rescue helicopter R-WB and taken to Poole HLS to be met by Poole Coastguard and a waiting ambulance for transportation to recompression chamber. (Coastguard report).

July 2005 05/408

Portland Coastguard received a call from dive support vessel reporting having a diver aboard suffering from suspected DCI, Coastguard rescue helicopter was scrambled airlifting the casualty to Poole HLS where they were met by Poole Coastguard and an ambulance for transportation to recompression chamber, (Coastguard report).

July 2005 05/189

A diver conducted a dive to a maximum depth of 32m using nitrox 34. He started his ascent after 32 min and took 8 min to rise to 6m. At this depth he completed a 10 min stop and then took a further 2 min to reach the surface. 40 min after the dive he felt one ear clear and became dizzy. He refrained from further diving. Once back on shore he found that he was unable to walk properly. He was placed on oxygen and specialised medical advice was sought. He went to hospital and from there to a recompression facility. He received two recompression treatments. He was diagnosed with a possible DCI of the inner ear. Dehydration and heavy exercise before the dive were cited as potential exacerbating factors. He was later passed fit to recommence diving.

July 2005 05/413

Brixham Coastguard tasked RN rescue helicopter R -193 to airlift a diver suffering from suspected DCI after dive to 66m, casualty was flown to DDRC Plymouth. (Coastguard report).

July 2005 05/180

A diver dived to 31m for 33 min. 2 hours 30 min later he dived to 15m for 33 min. The following day, 18 hours later, he dived, with two others, to a depth of 36m for 27 min with a 4 min stop at 6m. Shortly after getting back into the boat this diver was found to be dizzy and disorientated and he had a numbness in his right hand and leg. He was placed on oxygen and the Coastguard was informed. The diver's condition improved. He was airlifted to a recompression facility where he was treated for DCI.

July 2005 05/417

Dover Coastguard received a call from a dive boat reporting having two divers aboard suffering from suspected DCI following a dive to 25m, a medi-link call was established, the doctor recommended immediate evacuation by lifeboat, both divers taken by ambulance to Whipps Cross Hospital for treatment. (Coastguard & RNLI reports).

July 2005 05/217

Two divers surfaced having missed a 1 min stop. One of the pair developed symptoms of DCI and was airlifted to a recompression facility where she was treated for a serious spinal DCI.

July 2005 05/420

Humber Coastguard received a call from a dive support vessel indicating a diver with suspected DCI following a dive to 20m, the diver reported buoyancy problems causing him to ascend too fast at the end of the dive, the diver was airlifted by RAF rescue helicopter R-131 and transferred to hyperbaric chamber for treatment, Hull Coastguard prepared the HLS. (Coastguard & RNLI reports).

July 2005 05/299

Two divers conducted a dive to a depth of 60m using trimix. After 25 min they started their ascent. Both deployed delayed SMBs. One of the divers then abandoned his SMB and dropped back down onto the other diver and gave the 'out of air' signal. The other diver gave him his alternative air source and assisted him to 30m. The assisting diver switched to his nitrox 40 supply and indicated that the troubled diver should do the same. When he did so he inhaled some water and he then inflated his BCD and made a buoyant ascent to the surface. The abandoned SMB line was tangled around both divers and the other diver was dragged upwards. He managed to cut himself free and regain control of his ascent. The buoyant diver arrived at the surface in a panic. He was assisted into the boat. The other diver's SMB line had become tangled around the panicked diver and this was cut at the surface. The panicked diver was airlifted to a recompression facility and discharged after a precautionary treatment. The buddy discovered that his SMB had been cut and then deployed a small lifting bag as an SMB. He completed all his required stops and surfaced. 4 hours later he felt a pain in his lower back. The following morning his symptoms had worsened and he attended a recompression facility. He received a series of recompression treatments for a spinal DCI and had residual loss of sensation in his lower body.

July 2005 05/422

Liverpool Coastguard received a call from dive support vessel reporting having a diver aboard suffering from suspected DCI, the vessel was met by an ambulance and taken to hyperbaric chamber. (Coastguard report).

July 2005 05/263

A diver dived to 36m for 30 min with a 2 min stop at 6m. 19 hours 14 min later he dived to a maximum depth of 43m. For this second dive he was using a twin set in which one cylinder contained air and the other about 10% helium. Each cylinder had its own regulator. The dive initially planned was relatively shallow and the divers' dive planning information suggested that the helium could be treated just like nitrogen. However the dive plan was changed at short notice, because of the weather, and the diver neglected to reconsider his use of helium. He started the dive using the cylinder containing air and switched to the one containing helium when the contents gauge read 100 bar. He estimates this to have been 10 min into the dive at a depth of 36m. He left maximum depth after 20 min, ascended to 31m, and then deployed a delayed SMB. He ascended to 9m and 6m where he conducted a 1 min safety stop. At 3m his computer indicated that a stop was required. During this stop he felt an ache in his lower back. Then he felt a warm feeling spreading down his legs. He concluded that he had a spinal DCI. He switched back to the air cylinder. He completed an 18 min stop at 3m and surfaced. He was able to get back into the boat but unable to stand once in the boat. He was given fluids and placed on oxygen. The boat returned to shore and the diver was taken by ambulance to hospital. He was then airlifted to a recompression facility. He received seventeen sessions of recompression therapy over a three week period. After this he was able to walk unaided but was left with altered sensation below the waist.

July 2005 05/155

Two pairs of divers entered the water and conducted a 39 min dive to a maximum depth of 33m with safety stops at 9 and 6m. One of the group felt anxious in the water and she struggled to get back into the boat at the end of the dive. Back in the boat she felt faint and nauseous. She continued to feel unwell and refrained from further diving that day. Over the next two days her condition deteriorated and she developed a very severe pain in her shoulder. She was being treated for a previous shoulder injury. Three days later she sought advice from a recompression facility and received recompression treatment which resolved her symptoms.

July 2005 05/424

Liverpool Coastguard received a call from dive support vessel reporting having a diver aboard suffering from a severe headache following a dive to 27m, the diver was given oxygen and requested medical advice. The vessel was met by ambulance and taken to hyperbaric chamber for treatment. (Coastguard report).

July 2005 05/423

Shetland Coastguard received a call from a dive boat reporting having a diver aboard suffering from suspected DCI, at arrival in harbour the casualty and buddy were transferred to a waiting ambulance and transported to hospital for treatment. (Coastguard report).

July 2005 05/425

Humber Coastguard received a call from dive boat reporting having a diver aboard suffering from suspected DCI following a rapid ascent from 26m, the diver was in a threesome diving down a shotline when an un-equalised ear forced the diver to abort, ascending the shot alone and being recovered to the dive boat. Some short time later the diver felt better and attempted to rejoin the other pair at 26m, the diver forgot ankle weights and whilst attempting to descend by pulling down the shotline, the diver lost buoyancy control and made a feet first buoyant ascent, the boat party entered the water removing gear and recovered to the boat, no oxygen was on the boat. The diver was airlifted by RAF rescue helicopter R-128 to a recompression chamber for treatment, the aircraft was met by Hull Coastguard and a waiting ambulance. (Coastguard report).

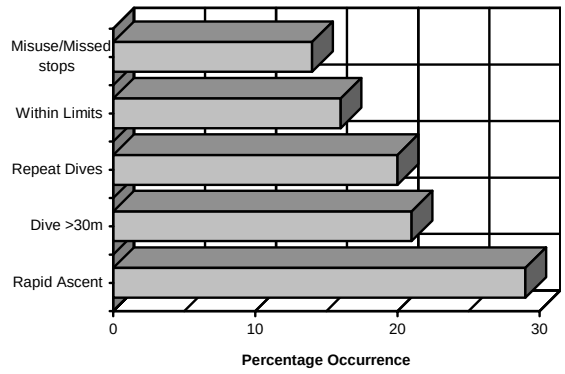
July 2005 05/428

Portland Coastguard received a call from a dive support vessel reporting having a diver aboard suffering from suspected DCI followed a rapid ascent from 22m, the casualty was airlifted from the vessel by Coastguard rescue helicopter R.IJ, the helicopter was met by Poole Coastguard who prepared the HLS, the casualty was taken to Poole recompression chamber by ambulance. (Coastguard report).

July 2005 05/426

Two divers were airlifted from a dive support vessel, one complaining of suspected symptoms of DCI, it is believed that one diver may have had a buoyancy problem and made a rapid ascent from 22m. The divers were met by Poole Coastguard and an ambulance at the HLS for transportation to recompression chamber. (Coastguard report).

Percentage analysis of factors involved in cases of DCI



July 2005 05/207

A diver dived to 32m for 38 min. 2 hours 54 min later he dived to 25m for 34 min. The following day he dived to 45m for 32 min and 2 hours 30 min later to 18m for 48 min. The following day he dived to 43m for 36 min and 2 hours 29 min later to 21m for 44 min. After the penultimate dive he noticed a 'twinge' in his upper right arm, but put this down to lifting a heavy weight. After the last dive he noticed a dull pain in his right upper arm. When driving home, after the last dive, the pain in his arm worsened. He sought medical advice and was advised to visit a recompression facility. He received three sessions of recompression treatment which eased the pain.

July 2005 05/300

Two divers conducted a dive to a depth of 37m. One of the divers deployed a delayed SMB to make their ascent. The reel jammed and dragged the diver upwards. He let go of the reel but was unable to stop the ascent. His buddy held on to him until 10m. The buoyant diver rose straight to the surface. The other diver completed a safety stop at 3m and then ascended to the surface. 10 min after surfacing the diver who had made the

rapid ascent noticed a pain in his wrist and lower arm. He was placed on oxygen and the Coastguard was alerted. Both divers were airlifted to a recompression facility. The diver with symptoms was recompressed and his symptoms were resolved.

July 2005 05/185

The Coastguard was alerted when a diver developed DCI. He was brought ashore by lifeboat and taken to a recompression facility for treatment. (Media report).

July 2005 05/201

A group of six divers were conducting a dive to a depth of 22m. One of the divers passed through a thermocline. This disorientated her and caused her to panic. She made a rapid ascent to the surface and the others went with her. Their dive time was 20 min. Once out of the water the diver was found to be in severe shock. She was placed on oxygen and the emergency services were alerted. She was taken to hospital and diving medical advice was sought. She was taken to a recompression facility and staff at the facility requested to see all those involved. Four members of the group were found to have symptoms of DCI and all four received recompression treatment.

August 2005 05/303

Two divers conducted a dive to 20m for 43 min with a 1 min stop at 3m. 2 hours 45 min later they dived to 16m for 49 min with a 1 min stop at 3m. 18 hours 23 min later they conducted a dive to a depth of 27m. They planned for a no-stop dive using their computers. After 29 min they started their ascent and one of the divers noticed that his computer was indicating that a decompression stop was necessary. They believe that they had been affected by nitrogen narcosis. They ascended to 3m and made the stop. Their computer cleared after 1 min but they followed their back up plan and completed a 5 min stop. 2 hours after the dive one of the divers felt a numbness in his arm. Medical advice was sought. The diver was placed on oxygen and taken to a recompression facility. Medical examination suggested a DCI in his arm and he received two sessions of recompression therapy. Two days prior to the dive he had pulled a muscle in his arm and it was thought that this had contributed to the problem.

August 2005 05/186

A diver suffered DCI after a dive to 52m. He was airlifted to a recompression facility for treatment. (Media report).

August 2005 05/231

Two divers conducted a dive to a maximum depth of 33m using nitrox 32. Towards the end of the dive one of the pair deployed a delayed SMB and they started their ascent. The diver with the SMB stopped at 5m to conduct a 3 min safety stop but the other diver, who had lost control of her buoyancy at around 10m, made a rapid ascent directly to the surface. Her dive duration was 30 min. The divers could see each other and the diver with the SMB signalled for the buoyant diver to wait at the surface for him. They were recovered into their boat. Neither diver reported the rapid ascent. The diver who had made the rapid ascent complained of a headache and of feeling sick. She vomited. The boat returned to shore and the diver stated that she still felt unwell and was advised to seek medical advice. The following day she still felt unwell and she went to a recompression facility. A cerebral DCI as the result of an embolism was diagnosed. The diver received a course of thirteen recompression treatments over a fifteen day period. She made a good recovery.

August 2005 05/232

A diver conducted a 32 min dive to a depth of 34m. The following day she dived to 33m for 30 min with a 2 min stop at 3m. She was using nitrox 27. She later experienced symptoms of DCI. It is thought that some exertion following the dive and dehydration may have been contributing factors.

August 2005 05/440

Dive support vessel contacted Stornoway Coastguard reporting having a diver aboard suffering from suspected DCI, a medi-link call was established with ARI, Coastguard helicopter R-MU was scrambled to airlift the casualty to recompression chamber for treatment. (Coastguard report).

August 2005 05/235

A diver completed a 30 min dive to 31m with a 3 min safety stop at 6m. 2 hours 50 min later he dived to 23m for 55 min with a 3 min stop at 6m. 90 min after the last dive he noticed a significant itchiness of his upper left arm. The Coastguard was alerted and the diver was given fluids and placed on oxygen. He was then taken to a recompression facility where he received recompression treatment. His symptoms were resolved. He was advised to seek examination for a PFO.

August 2005 05/443

Portland Coastguard received a call from a dive vessel reporting having a diver aboard suffering from suspected DCI, the casualty was airlifted from the vessel by Coastguard rescue helicopter R-VA and the aircraft was met by an ambulance, doctor and Poole Coastguard. (Coastguard report).

August 2005 05/444

Portland Coastguard received a call from dive boat reporting having a diver aboard suffering from suspected DCI after becoming entangled in netting and surfacing without stopping. The casualty lost contact with his buddy who then became entangled in netting, the diver attempted to release his delayed SMB but this compounded the problem, the diver panicked making a rapid ascent from 29m. The diver was airlifted by Coastguard rescue helicopter R-WB to Poole HLS where he was met by an ambulance, doctor, and Poole Coastguard, the dive boat was met by Westbay Coastguard. (Coastguard report).

August 2005 05/237

A diver conducted a dive to a maximum depth of 9m. Towards the end of the dive he was swimming back up a sloping seabed. At 5m he was lifted by swell and this caused him to make an uncontrolled ascent to the surface. His dive duration was 32 min. 2 hours 20 min later he dived to 9m for 32 min. The following day the diver sought advice from a recompression facility and was treated for a neurological DCI.

August 2005 05/236

Two divers conducted a 29 min dive to 43m including a 5 min stop at 7m and a 3 min stop at 3m. 2 hours 30 min later they dived to 27m for 41 min including a 5 min stop at 6m and a 4 min stop at 3m. After this second dive one diver noticed a pain in his right shoulder and the other a pain in her left arm. Both put this down to muscle strain whilst climbing back into the boat. The first diver's shoulder pain increased and he developed a rash and swelling to his right bicep and over his collar bone to the centre of his back. He went to a recompression facility and was treated for DCI. The second diver's condition also worsened and, about 24 hours after the dive, her arm felt 'solid, hot, sore and scratchy'. The following day she too went to the recompression facility and joined her

buddy for his second recompression treatment. No further treatment was required. One of the divers was subsequently checked for a PFO but none was found.

August 2005 05/238

A diver conducted a 28 min dive to 30m including a 3 min stop at 6m. 1 hour 40 min later he dived to 17m for 51 min with a 1 min stop at 6m. After this dive he felt a pain to the left side of his stomach and found that he had a bruise that felt sore. He discussed this with his dive buddy and they concluded that part of his dive equipment may have been responsible. Later, whilst unloading the boat, he felt a sharp pain in his chest when he breathed. He then felt nauseous and developed a headache. He thought that it was the onset of migraine and took some pain killers. The mark on his stomach spread and his breathing was still causing him problems. On the way home he was taken to a hospital and then on to another hospital by ambulance. He was given oxygen which improved his condition. Advice was sought from a recompression facility and he was transferred there by ambulance. He was given recompression treatment but, after 2 hours he felt quite poorly and the treatment was terminated. He had a second treatment the following day after which he was discharged.

August 2005 05/448

Newcastle General Hospital contacted Humber Coastguard requesting assistance to transfer a casualty to a recompression chamber, the diver had made two dives earlier that day, the first 30m the second 15m with a 30 min surface interval, the casualty developed numbness in his hand on the first dive which was exacerbated on the second, the diver was given medical advice and transferred from hospital by ambulance to Hull hyperbaric chamber for treatment. (Coastguard report).

August 2005 05/449

Portland Coastguard received a call from dive support vessel reporting having a diver aboard suffering from suspected DCI, Coastguard rescue helicopter R-WB was tasked to recover the casualty to recompression chamber, the helicopter was met at the HLS by Poole Coastguard and an ambulance. (Coastguard report).

August 2005 05/454

Brixham Coastguard were alerted by dive vessel of a diver aboard suffering from suspected DCI following a dive to 26m 46 min, the vessel was advised to make way to harbour where they were met by Plymouth Coastguard and an ambulance for transportation to DDRC Plymouth. (Coastguard report).

August 2005 05/241

A diver completed a 40 min dive to a depth of 28m with a 10 min stop at 6m. Later that day, while travelling home, he developed a pain in his shoulder. He sought medical advice and attended a recompression facility. He was kept in overnight and received recompression treatment the following day which resolved his symptoms.

September 2005 05/460

Portland Coastguard received a call from dive support vessel reporting having a diver aboard who had missed 3 min of stops following a dive to 20m, the diver was now semiconscious and complained of loss of feeling in the lower limbs, Portland tasked Coastguard rescue helicopter R-WB to airlift the casualty to recompression chamber, the aircraft was met by Poole Coastguard and a waiting ambulance. (Coastguard report).

September 2005 05/459

Falmouth Coastguard received a call from dive support vessel reporting having a diver aboard with suspected DCI following a dive to 32m, a medi-link call was established with QAH, the doctor recommended an air evacuation to recompression chamber, RN rescue helicopter R-193 transferred the casualty to DDRC Plymouth, Penzance Coastguard gathered details from the vessel on return to port. (Coastguard report).

September 2005 05/462

Dive RHIB contacted Portland Coastguard reporting having a diver aboard suffering from suspected DCI. Portland Coastguard tasked Coastguard helicopter R-WB to airlift the casualty to recompression chamber, the aircraft was met at the HLS by Poole Coastguard, police and ambulance. (Coastguard report).

September 2005 05/275

A diver using trimix completed a dive to 52m for 74 min including the following stops; 4 min at 18m, 2 min at 15m, 2 min at 12m, 4 min at 9m, and 11 min at 6m. Later that day his shoulder became painful. He sought medical advice and received recompression treatment. The results were inconclusive and it was uncertain if it was DCI or a muscle strain.

September 2005 05/246

A diver dived to 12m for 57 min. 23 hours later he dived with a buddy to 43m. They started their ascent and, at 35m, his computer went blank. They completed their ascent using the buddy's computer. Their dive duration was 66 min with a 3 min stop at 12m, a 1 min stop at 9m, and a 15 min stop at 6m. The diver with the failed computer felt a little light at the 6m stop but managed to control his depth by breathing very shallowly. Shortly after leaving the water he noticed an ache in his shoulder. He was placed on oxygen and this eased the symptom. Medical advice was sought and the Coastguard was alerted. The diver was airlifted to a recompression facility where he received treatment.

September 2005 05/467

Stornoway Coastguard received a 999 call from St. Kilda base reporting a diver aboard a diving vessel was suffering from suspected DCI, a medi-link call was established and the doctor recommended immediate air evacuation to a hyperbaric chamber at Aberdeen, the casualty was airlifted by RAF rescue helicopter R-137. (Coastguard report).

September 2005 05/247

An instructor was engaged in training drills with 2 students. He used a third person to demonstrate controlled buoyant lift; ascending from 6m to the surface. After his demonstration each of his students practiced the drill. They then completed some further training at the surface. About 40 min later the students conducted two further controlled buoyant lifts from 6m to the surface. After this the group went for a dive to 22m. The last part of this dive was 6 min at 6m with a normal ascent to the surface. That night the instructor awoke feeling nauseous and dizzy and with 'pins and needles' in his hand. He sought medical advice and went to a recompression facility where he was treated for DCI. The treatment resolved his symptoms.

September 2005 05/255

A diver conducted a dive to a maximum depth of 49m. He made a 3 min stop at 9m but then surfaced missing other planned stops due to an equipment failure. His dive duration was 36 min. He complained of an all over tingling feeling and

pains in his joints. The Coastguard was alerted and the diver was placed on oxygen. He was taken by lifeboat and helicopter to a recompression facility for treatment. (Coastguard report).

September 2005 05/276

Two divers completed a dive to 22m for 31 min with a 3 min stop at 6m. 2 hours later they dived to 20m for 36 min with a 5 min stop at 6m. During the ascent from this last dive they struggled to control their buoyancy and went between 18 and 12m a few times. They finally managed to stabilise at 15m where they deployed their SMB. Two days later one of the divers developed 'pins and needles' in her forearms and lower legs and mild joint pain in her hands. She sought medical advice and received four sessions of recompression treatment. Eight days after the dive her buddy attended the recompression facility with a slight headache. He received three sessions of precautionary recompression treatment.

September 2005 05/249

Two divers descended a shotline. They descended very slowly as one of the pair had problems clearing his ears. They took 15 min to get to 27m. After 29 min and with 2 min bottom time remaining on their computers they started their ascent. One of the divers deployed his delayed SMB and the other diver used it as a guide. At around 20m the other diver experienced buoyancy problems and inverted himself so that he could fin downwards. The SMB line became slack and started to become tangled around the buoyant diver so it was abandoned. The buddy tried to assist the buoyant diver by attempting to release air from his BCD, but he was not able to reach it. The buoyant diver's regulator became dislodged but he was able to replace it. They began to ascend rapidly, the buddy let go of the buoyant diver and they became separated. The buddy made a normal ascent. The buoyant diver rose directly to the surface. He was recovered into the boat and placed on oxygen. The buddy breathed nitrox 40 once back in the boat. The Coastguard was alerted and the divers were airlifted to a hospital. Both were found to be asymptomatic and discharged. The following day the buoyant diver developed a rash, nausea and giddiness. He sought medical advice and received recompression treatment. His symptoms were resolved.

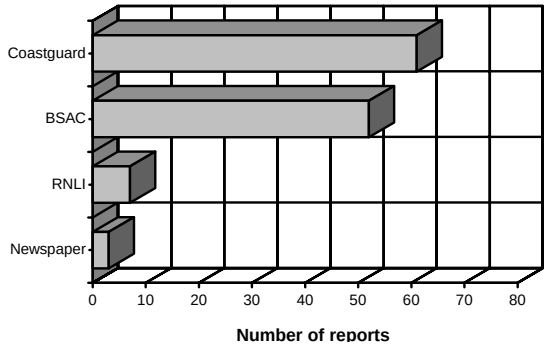
September 2005 05/250

A diver conducted a 22 min dive to a depth of 16m. 24 hours later he dived to 44m. He was using a drysuit that he was not familiar with and on the first dive a lot of water leaked into the suit. Believing that the suit's automatic valve was at fault, he left it closed during the second dive and attempted to operate it manually. As he ascended the shotline from the second dive he felt buoyant and had difficulty dumping air. He made a 1 min stop at 24m, a 2 min stop at 21m, a 1 min stop at 18m and a 2 min stop at 15m. Due to his buoyancy problems and the effects of swell, he missed a planned stop at 12m. He had switched to nitrox 50 at 16m and he made an extended 7 min stop at 9m. He then moved to 6m where he intended to make a 21 min stop. He attempted to dump air from his suit by depressing the dump valve and squeezing his arms against his torso to drive air out of the suit. He thinks that this action inadvertently actuated the air feed to his BCD. The result was that he made a buoyant ascent to the surface, missing 17 min of decompression. He was recovered into the boat and placed on oxygen. The Coastguard was alerted and the diver was airlifted to a recompression facility where he received treatment.

September 2005 05/473

Portland Coastguard received a 'Pan Pan' call from dive vessel reporting having a diver aboard suffering from suspected DCI following a rapid ascent from 29m, lost buoyancy control on ascent despite best efforts to dump air. The casualty was recovered to the parent vessel and given oxygen, Portland Coastguard tasked Coastguard rescue helicopter R-WB to airlift the casualty to recompression chamber, the helicopter was met by Poole Coastguard and an ambulance at the HLS. (Coastguard report).

Decompression data source analysis



September 2005 05/252

A diver conducted a 38 min dive to 31m with a 1 min stop at each of 18, 15 and 9m and a 3 min stop at 6m and 3m. 2 hours 30 min later he dived to 29m. During the ascent from this dive he began to feel too buoyant. At 9m he tried to fin downwards to maintain his stop depths but this became increasingly more difficult. He had risen to 6m and at this point decided to stop trying to hold his depth. He signalled to his two buddies and rose to the surface. At the surface he was recovered into the boat, given water and placed on oxygen. His computer indicated that he had missed 7 min of decompression stops. His dive duration was 32 min. His buddies made a normal ascent. The Coastguard was alerted and a lifeboat collected the diver and brought him to the shore. He was taken by ambulance to a recompression facility. Examination indicated that his balance was affected and he was recompressed. The treatment significantly improved his symptoms.

September 2005 05/475

Clyde Coastguard was alerted to a diver suffering from suspected DCI following a rapid ascent from 50m, the diver had requested medical advice from ARI, Clyde Coastguard tasked RAF rescue helicopter R-177 to airlift the casualty to recompression chamber. Coastguard teams from Tarbert and Cumbrae assisted. (Coastguard report).

September 2005 05/476

Portland Coastguard received a call from a dive support vessel reporting having a diver aboard suffering from suspected DCI, following a dive to 30m, the diver had completed all deco for the dive according to computer, rescue helicopter R-WB airlifted the casualty to the HLS where it was met by Poole Coastguard and Dorset ambulance service. (Coastguard report).

Injury / Illness

October 2004 05/009

Two divers entered the water, descended to 6m and then followed the sloping bottom into deeper water. At 13m the dive leader looked round for his buddy, but could not see her. He surfaced and waited to see if she came to the surface too. When she did not he raised the alarm. A rescue team quickly responded. Meanwhile two other divers had found the missing diver, on her back, on the bottom at 6m, with her regulator out of her mouth. They brought her to the surface and she was recovered from the water. Resuscitation techniques were applied and the emergency services were alerted. She was taken by ambulance to hospital where her condition was described as critical.

October 2004 05/006

A pair of divers descended a shotline to a depth of 11m. On arrival at the bottom, one of the pair experienced dizziness, nausea and disorientation. He had a sharp pain in his ear and the feeling of liquid moving around. The divers aborted the dive, making a normal ascent to the surface. Subsequent medical examination revealed a burst eardrum.

November 2004 05/024

A group of divers travelled by RHIB to a dive site. Once there, one of the group started to feel seasick. He was sick but then felt well enough to make the dive. He dived to 35m for 25 min. Once back on the boat he continued to be sick. He then complained of feeling cold. The air temperature was 4 deg C and the water temperature was 13 deg C. He was given warm clothing to wear and a hot drink. He was sheltered from the wind on the return trip. The radio was used to call an ambulance which met the party when it arrived back in the harbour. The casualty was found to have suffered from mild hypothermia but he quickly recovered.

November 2004 05/015

Two divers dived to a depth of 27m. 12 min into the dive one of the pair indicated that he had a problem with his head and that he wanted to return to the surface. He switched to his pony cylinder which contained nitrox 27. They started their ascent but the troubled diver experienced problems with his buoyancy control and began to sink; every time he put air into his suit it escaped through the dump valve. His buddy brought him to 6m using a controlled buoyant lift; at this point the troubled diver regained control and they finished the dive. Once out of the water, the troubled diver explained that he had nearly passed out and that he had had a bad headache that got better when he switched to his alternative gas supply. The diver conducted a dive the following day without any problem. Subsequent testing revealed no problems with the quality of the diver's air.

December 2004 05/327

Portland Coastguard received a mobile telephone call from the coordinator of a diving course reporting having a diver suffering from breathlessness. The diver was administered oxygen at the scene by the diving supervisor, an ambulance was tasked by Portland Coastguard attending to the diver who was transferred to hospital as a precautionary measure. (Coastguard report).

December 2004 05/014

A diver using a rebreather conducted a dive to 36m. Later he dived again to a depth of 20m. He began to feel uneasy, his vision blurred and he began to feel confused. He switched to an open circuit regulator and the symptoms resolved. He flushed the loop of his rebreather and switched back to it. A little later he began to feel unwell again and again he flushed the loop. Later he repeated this process and then he ascended to the surface. Subsequently the diver found a small quantity of water in the scrubber. He also felt that some settling had taken place in the scrubber.

December 2004 05/033

A diver conducted a dive to a maximum of 20m wearing a two-piece, 5mm wetsuit. During the dive he became cold so he swam back to the exit point with his buddy. Once at the surface he became very cold and had to be treated for hypothermia.

January 2005 05/044

Two trainees and an instructor were engaged in a pool training session. The instructor demonstrated an exit over the side of the pool at the deep end. The trainees removed their equipment and made a similar exit. One of them hit the side of the pool and then climbed out. Later that day he felt discomfort and attended hospital. A cracked rib was discovered.

January 2005 05/035

Two divers were engaged in a dive at a depth of 25m. After 30 min, one of the pair began to feel ill. She felt nauseous and she had a headache. Her buddy brought her to the surface and she was placed on oxygen. The diver was taken by ambulance to hospital and released later that afternoon. Contamination of her air supply was suspected.

February 2005 05/063

After a dive in a quarry a diver was carrying her twin cylinder set up some steps when she slipped and fell. She hit her face on the steps. She had cuts to her forehead and bruising.

February 2005 05/481

Lifeboat launched to assist diver(s) with illness. One person brought in. (RNLI report).

February 2005 05/283

A member of the public was participating in a 'Try Dive' session in a swimming pool. She had signed a fitness to dive form and after a briefing session participated in the use of diving equipment in a depth of 2m. She then took a swimming test and entered the water for a second session with diving equipment. At this point she stated that she felt unwell. She felt a tightness around her neck, nausea and a feeling of indigestion. She was assisted from the water. Her condition deteriorated and an ambulance was called. The diver then stated that she suffered from lupus and was on steroid treatment. She was placed on oxygen and taken to hospital.

March 2005 05/285

A diver was carrying a cylinder along the side of a swimming pool. He slipped and fell and his dive cylinder bounced off the floor and hit him in the face. He was dazed but required no medical attention.

March 2005 05/100

A diver was at his maximum depth of 21m when his regulator began to free flow. He made a rapid ascent to the surface. His

total dive time was 6 min. The water temperature was 6 deg C. His tongue and the inside of his mouth were frozen and he could not talk. He was removed from the water and placed on oxygen. He lost skin from the inside of his mouth over the next few days but suffered no other ill effects.

March 2005 05/072

An elderly diver conducted a dive to 16m using an 8l cylinder. He ran out of air after 3 min. His buddy offered her alternative air source but he refused this and made a fast ascent to the surface. He arrived at the surface unconscious. He was recovered to the shore and two divers from another party helped with the resuscitation efforts. An automatic defibrillator was used. After a few minutes the casualty began to breathe for himself. He regained consciousness and was taken by helicopter to hospital. His buddy was taken by ambulance to hospital and treated for shock.

March 2005 05/106

Two divers had completed a 20 min dive to 20m. Once at the surface they signalled to their boat. Another boat mistook the divers for their own and approached them. The mistake was realised and the boat was put into neutral and it drifted between them. Once the boat had passed the divers regrouped. However this boat then drifted too close to the divers and, not realising that they were close, the cox put the engine into gear. One diver managed to hold on to the boat but the other was struck on the legs by the propeller. Once the engine had been shut off the injured diver pulled himself to the side of the boat, assisted by his buddy. They were recovered into the boat and the diver's injuries were assessed. They were then transferred into their own boat and the injured diver was taken to hospital. He was treated for grazes and cuts to his legs, one cut required five stitches.

March 2005 05/109

A diver made a 25 min dive to 6m. 1 hour 20 min later he dived to 6m for 25 min. After this dive he suffered from cold, he was shivering and felt sick. He was placed on oxygen and 45 min later had made a full recovery. The water temperature was 6 deg C.

April 2005 05/084

A diver was stepping into an RHIB from a pontoon when she slipped and landed awkwardly on her left ankle. She was taken to hospital and treated for a broken ankle.

April 2005 05/346

Clyde Coastguard were contacted by a dive party reporting a member of their club was displaying symptoms of DCI 36 hours after a dive. The diver was medi-linked with a doctor, the discussion covered the activities of the post-dive events. It was decided to airlift casualty to hospital for further investigation, air ambulance transported to hospital where the casualty was treated for jellyfish stings. (Coastguard report).

April 2005 05/138

A diver conducted a dive to a maximum depth of 20m. During the ascent the delayed SMB became tangled with the shotline due to poor visibility and a strong current. The diver completed a 3 min safety stop on the shotline. When he let go of the shotline he sank, with his buddy, back down to 10m from where they made a quick ascent to the surface. Two days later the diver experienced a tingling in his arm. He sought advice from a recompression facility and received two sessions of recompression treatment. His symptoms persisted. He was referred to his doctor and the final diagnosis was tennis elbow; a condition that he had suffered from previously.

April 2005 05/491

Lifeboat launched to assist diver(s) with illness. One person brought in. (RNLI report).

April 2005 05/349

Portland Coastguard received a call from a dive vessel reporting having an injured crewman onboard. The injury occurred when the anchor was recovered, the casualty suffered a hand trapped between the anchor rope and gunwale as the vessel pitched. The vessel was responding to a request for assistance from another vessel that had broken down. The vessel was met by an ambulance and Swanage Coastguard on return to port. (Coastguard report).

April 2005 05/089

An instructor and two trainees started a descent. At 5m one of the trainees signalled 'stop' and indicated a problem with his left ear. The instructor brought them back up to 3m and the trainee indicated that all was well. They re-descended very slowly and reached the bottom at 12m without further incident. After the dive the diver with the ear problem reported that his ear was sore. The passage to his eardrum was inflamed and swollen and blood was seeping from the ear. He sought medical attention. He was given pain killers and advised to seek re-examination two weeks later, prior to any further diving.

May 2005 05/294

Two divers conducted a dive to a maximum depth of 25m. Towards the end of the dive one of the pair began to feel unwell. They started to ascend the shotline, after a duration of 26 min, and the troubled diver then found it difficult to breathe. They moved up the shotline but the condition did not improve. They made a 1 min stop at 6m but the troubled diver decided that she could not continue her stops and she ascended to the surface. At the surface she struggled to breathe and had to be assisted back into the boat. Her buddy made a normal ascent. The diver was placed on oxygen and the Coastguard was alerted. The casualty was airlifted to a hospital and a pulmonary immersion oedema was diagnosed. She was given a precautionary recompression treatment for the missed stops. She was not thought to have been suffering from DCI. She was discharged from hospital the following day.

May 2005 05/127

A diver completed a dive to a maximum depth of 15m for a duration of 20 min. He became separated from his buddy, briefly, towards the end of the dive. The party returned to the shore and 2 to 3 hours after the dive the diver complained of pain in his chest and difficulty breathing. He had been working hard carrying and sorting diving equipment. He was placed on oxygen and taken to a recompression facility. A heart problem was diagnosed and the diver was taken to hospital. He was found to have had a mild heart attack.

May 2005 05/125

Three divers conducted a dive to a maximum depth of 34m. One used nitrox and the other two used air. They planned to conduct their decompression according to the air computer but incorporating deep stops. After 28 min they started their ascent. They conducted the following stops; 20m for 2 min, 13m for 2 min and 6m for 1 min. They then started to ascend to 3m for further stops. However there was a strong swell which could be felt at 5m so they stopped there to conduct the remaining stops. After 1 min, one of the three became seasick and vomited. This diver was able to remove their mouthpiece to vomit and then

replace it. However the second time the mouthpiece was not removed and proved difficult to clear. This diver and one other ascended to the surface; the last 3m of the ascent was fast. The divers were recovered into the boat. The air divers had missed 12 min of decompression stops. The diver who had been sick was placed on oxygen and the other on nitrox 75. The third diver had not missed stops. The Coastguard was alerted and medical advice was sought. The boat started its return journey during which the two air divers were airlifted to a recompression facility. They exhibited no symptoms but received precautionary recompression treatment.

May 2005 05/092

A diver panicked and banged his head. He subsequently swallowed seawater. The Coastguard was alerted and the injured diver was airlifted to hospital. During this time a rope became tangled round the boat's propeller and the boat drifted away from two other divers who were still in the water. Another helicopter was launched and other boats in the area asked to assist. Another dive boat recovered the two divers and returned them to the disabled boat. Two lifeboats were launched to assist and the helicopter was recalled. One of the party managed to free the propeller and the boat returned safely to shore. (Coastguard & RNLI reports).

May 2005 05/141

Three divers entered the water to conduct training drills with an SMB. The trainee carrying the SMB made a rapid uncontrolled descent because he was concentrating on the SMB reel. He failed to equalise his mask on descent and he suffered mask squeeze. He equalised on the bottom and the dive continued with our incident. Their maximum depth was 22m and the dive lasted 22 min. Later the diver felt discomfort and sought medical advice. He was sent to an eye specialist but no permanent damage was discovered.

May 2005 05/132

A diver entered the water and attempted to dive. He tried three times but each time he experienced a severe pain behind his eyes and was forced to surface. He reached a maximum depth of 6m and his total dive duration was less than 3 min. After leaving the water he collapsed. He was placed on oxygen and taken, by ambulance, to hospital from where he was discharged later that day. It is thought that the problem was not diving related.

May 2005 05/227

A group of four divers commenced a dive on a wreck to a maximum depth of 36m. Once at the wreck, one of the four felt uneasy and indicated that she had a problem. The dive leader signalled that they should ascend. At this point one of the others began to panic. The dive leader brought both divers up the shotline, with his buddy following behind. He asked the dive boat to pick up the two divers and returned to his buddy who was at 10m. On reaching the surface the buddy complained of a tightness when she breathed. She was placed on oxygen and taken to hospital. The diver received treatment for a pulmonary oedema.

May 2005 05/360

Solent Coastguard received a call from a diving vessel reporting having a diver aboard suffering from respiratory distress following a normal dive and ascent. The casualty was airlifted from the vessel by Coastguard rescue helicopter R-IJ and transferred to a waiting ambulance for transportation to hospital. (Coastguard report).

May 2005 05/365

Dive support vessel called Brixham Coastguard reporting having an unconscious diver aboard receiving oxygen. The casualty had ceased breathing and was receiving CPR. Brixham Coastguard tasked RN rescue helicopter R-193 to airlift casualty from vessel. Plymouth Coastguard assisted at the HLS the casualty was transferred to a waiting ambulance for transport to DDRC Plymouth. (Coastguard report).

May 2005 05/143

Two divers conducted a dive to a maximum depth of 21m. At the start of the dive they had to fin hard to gain depth and to move out of a strong current. After 33 min they ascended from 14m to the surface in 3 min. At the surface both inflated their BCDs and awaited collection by their boat. At this point one of the divers stated that he could not move. His buddy supported him and summoned assistance. He was recovered into the boat and his wetsuit was removed. He was totally paralysed and had lost his sight. The Coastguard was alerted and the boat returned to the shore. They were met by an ambulance and a helicopter arrived to assist. It was initially concluded that he had not suffered DCI. The diver's paralysis resolved and his sight returned. He was airlifted to a recompression facility for observation.

May 2005 05/198

A trainee was diving to a maximum depth of 6m with an instructor and another trainee. He began to feel unwell and made a rapid ascent to the surface. His dive duration was 32 min. At the surface he was sick twice. He complained of feeling tired and that his shoulder hurt. He was placed on oxygen. He declined to seek further medical advice and subsequently reported that he had had little sleep the previous night and that a migraine attack had caused the problem.

May 2005 05/197

A trainee diver was conducting drills at a depth of 6m. She began to feel unwell and she ascended with her instructor. Their dive duration was 20 min. She was placed on oxygen but continued to feel unwell. She returned home and sought medical advice.

May 2005 05/370

Brixham Coastguard tasked RN rescue helicopter R-193 to airlift a diver from dive support craft, the diver was lapsing in and out of consciousness and was flown to DDRC Plymouth. (Coastguard report).

May 2005 05/199

Two divers completed a 32 min dive to a maximum depth of 17m. Once at the surface one of the pair suffered blurred vision. He also noted a pain down the side of his face and into his jaw, and he suffered a slight nose bleed. He was placed on oxygen and his condition improved. He was advised to seek medical advice.

May 2005 05/147

A diver completed an air dive to 33m for 35 min with a 2 min stop at 9m and a 6 min stop at 6m. 2 hours 14 min later he made a second dive. He dived using nitrox 36. He descended the shotline but reached his maximum oxygen depth of 29m before reaching the bottom. He aborted the dive and made a 3 min stop at 6m. His second dive duration was 11 min. He later slept in his car before departing. When he woke up he had 'pins and needles' in his right arm. These symptoms started to disappear as soon as he started driving, but did not resolve completely. He sought medical advice and went to a recompression facility.

He was given recompression treatment. His symptoms improved but did not disappear. He subsequently consulted a physiotherapist and a trapped nerve was diagnosed.

June 2005 05/156

Two divers completed a 10 min dive to a maximum depth of 35m. Back in the boat, whilst waiting for other divers, one of the pair was sick. Once ashore she carried her kit to the top of some steps. She became breathless and complained of chest pains. She was placed on oxygen and advice was sought from a recompression facility. She was taken to hospital and kept in for observation.

June 2005 05/382

Solent Coastguard received a call from dive support vessel reporting having a diver aboard with respiratory distress following a dive to 82m, the casualty was airlifted by Coastguard helicopter R-IJ direct from the vessel and transported to QAH for treatment. (Coastguard report).

June 2005 05/297

Two pairs of divers entered the water from a quayside. The last to enter struck her leg on an underwater object. She felt a pain in her leg and ankle. She told the others but after a while decided that she could continue the dive. They dived to 11m for a duration of 29 min. When they surfaced the diver said that her leg was hurting badly. She was carried from the water. Her knee was found to be badly swollen. She was taken to hospital where a broken tibia was found which required surgical resolution.

June 2005 05/392

Two divers were transferred from a dive boat after feeling discomfort following a dive to 28m for 27 min, the divers were met by ambulance and Plymouth Coastguard for transportation the hospital/chamber. (Coastguard report).

July 2005 05/409

Brixham Coastguard received a call from dive support vessel reporting having a diver aboard suffering from shortness of breath following a dive to 34m, the diver was met by paramedic and a medi-link call to DDRC Plymouth concluded the diver was thought to be suffering from a non-dive related problem. (Coastguard report).

July 2005 05/411

Milford Haven Coastguard received a call from a dive boat reporting having two divers aboard having swallowed salt water upon ascent, medical advice was sought and an ambulance was requested to meet the divers on their return to shore, no further medical assistance required. (Coastguard report).

July 2005 05/419

Portland Coastguard received a call from a dive boat reporting having picked up a diver from another RHIB who had possible head injury. Upon further investigations, the casualty had been given oxygen and water, was also suffering contraction type pains, the vessel picking up the buddy diver had a doctor on board, the casualty, buddy and casualty's partner were recovered by Coastguard rescue helicopter R-WB. The vessel had a faulty VHF and was met by West Bay Coastguard where safety advice was given to the crew. (Coastguard report).

August 2005 05/302

Two divers entered the water to dive to a wreck. There was a current and they had to swim hard to reach the shotline. They pulled themselves down the shotline. One of the pair became very tired. At the bottom they swam around the wreck. The tired diver kept returning OK signals but her buddy realised that she was not right and led her back to the shotline. Their bottom time was 16 min. They ascended to 5m where they made a safety stop. The buddy then saw that the distressed diver's head was rolling backwards and forwards in the swell. She then floated to the surface. Her buddy followed. At the boat she was not able to hold on, she had her regulator out and water was washing over her. Her regulator was replaced and she was assisted into the boat. She was placed on oxygen and her condition improved. She coughed up bloodstained sputum. Once ashore the diver was able to walk up the slipway. Then she experienced breathing difficulties. She was placed on oxygen and taken to hospital. She was found to have pulmonary oedema. A mild heart attack was also suggested. Tests continue.

August 2005 05/195

Portland Coastguard received a 'Mayday' call from dive support vessel conducting a technical dive to 55m, one of the divers surfaced unconscious and not breathing, Coastguard rescue helicopter R-WB was diverted from exercise to recover the casualty from the vessel. As the casualty was in a very serious condition the helicopter took the casualty to hospital, the two buddy divers were airlifted by Coastguard rescue helicopter R-IJ, both aircraft delivered the casualties to the HLS at Poole where they were met by a doctor, ambulance and Poole Coastguard all divers received treatment. The dive details showed that one casualty had used the incorrect % of oxygen being 100% instead of 50% making him convulse, was aided to the surface by buddy divers and recovered into the vessel by hydraulic lift. (Coastguard report).

August 2005 05/307

A diver was attempting to enter a boat by the stern. The diver was struck by the boat's moving propeller and one of his legs was amputated. He was recovered into another boat and the Coastguard was alerted. The diver was taken to the shore and then by ambulance and helicopter to hospital. His other leg was badly injured and it was amputated too. A doctor who was diving in the area heard the emergency call and went to assist.

August 2005 05/267

A diver was kitting up for a dive from a boat. The boat was caught by a swell and this caused the diver to fall. She hit her head on a railing of the boat. She felt no pain and there was no visible injury. She completed a 32 min dive to 20m with 3 min decompression at 6m. Two days later she developed sickness, dizziness, a headache, double vision and confusion. She sought medical advice. Concussion was diagnosed. She made a full recovery.

August 2005 05/269

Two divers conducted a dive to a maximum depth of 15m. The dive followed a saw tooth profile. One of the divers felt dizzy and they aborted the dive, making a normal ascent with a safety stop. The diver who had felt unwell was placed on oxygen for 20 min and advised to seek medical help if he experienced further problems.

August 2005 05/240

A diver conducted a 33 min dive to a depth of 16m. 1 hour 52 min later she dived to a maximum depth of 16m for 27 min. Most of the dive was spent at about 7m. Towards the end of the dive she indicated to the dive leader that she had a headache and wanted to ascend. They made a normal ascent and were recovered into the boat. The diver then began to feel sick. This was initially put down to rough sea conditions but once on land

she continued to be sick. Medical advice was sought and she was taken to hospital. A non-diving related illness was diagnosed. The diver had recovered by the following day.

August 2005 05/272

Two divers were 10 min into a dive at a depth of 12m when one of them felt that he could not breathe. He made a rapid ascent to the surface and was assisted from the water. He was in distress and the emergency services were alerted. The diver was placed on oxygen and taken to hospital by ambulance. He was discharged later that day. It was initially thought that he had suffered a heart attack, but later it was suggested that the diver had been suffering from a chest infection.

August 2005 05/273

Two divers conducted a 45 min dive to 19m with 15 min spent at 6m at the end of the dive. Afterwards one of the two felt unwell and weak. He was placed on oxygen and his condition quickly improved.

August 2005 05/447

Humber Coastguard tasked RAF rescue helicopter to airlift a diver suffering from a diving related illness to hospital for treatment. MRCC Aberdeen arranged an ambulance at the HLS, where it was met by Seahouses Coastguard and RNLI personnel. (Coastguard report).

August 2005 05/274

A diver conducted a dive to a maximum depth of 25m. Just prior to his ascent he coughed and as a result inhaled some water. This caused him to continue coughing all through his ascent and a 3 min safety stop at 6m. At the surface he was able to regain control and suffered no subsequent ill effects. His dive duration was 40 min

August 2005 05/243

A diver entered the water with three others to conduct navigational training drills. During the descent she was concentrating on the exercise and forgot to clear her ears. When she did attempt to clear them she heard a loud pop in her left ear and became very disorientated, feeling that she was spinning round. She indicated the problem to her dive buddy and the group assisted her to the surface. Once at the surface she began to feel better and decided to make a second attempt at the task. She descended to 13m and started the exercise. She then began to feel dizzy and nauseous again. She indicated this to the dive leader and they aborted the dive. The other two divers continued alone. The following day the diver attended hospital where a perforated ear drum was diagnosed. It was later discovered that one of the divers from the second pair had also suffered a minor eardrum perforation. This second diver had a history of ear drum weakness and previous perforations; but had been cleared to dive.

September 2005 05/244

A diver completed a 37 min dive to a depth of 24m with a 3 min stop at 6m. 4 hours 47 min later she dived to 29m for 37 min with a 3 min safety stop at 6m. Shortly afterwards she complained of a very bad headache. She was given water and lay down in the wheelhouse of the boat. 15 min later she began to shake and reported chest and back pains and a shortage of breath. She was placed on oxygen and the Coastguard was alerted. The diver was airlifted to hospital where a severe migraine was diagnosed. The diver was discharged from hospital the following day.

September 2005 05/245

A diver completed a 49 min dive to a depth of 22m with a 2 min safety stop at 6m. After this dive he had a slight headache which cleared after 15 min. 3 hours 6 min later he dived to 22m for 43 min with a 2 min safety stop at 6m. After this dive the diver complained of a headache and was sick. On return to shore he breathed nitrox 50 for 1 min and this improved his headache. Later that evening it was noticed that he was developing an expanding rash. He sought medical advice and received two sessions of recompression treatment. It was concluded that the condition was not diving related.

September 2005 05/279

Two divers dived to a depth of 6m at which point one of the pair experienced chest pains. They aborted the dive. The pains continued for a further 20 min and the diver planned to seek medical advice.

September 2005 05/278

A diver was preparing to enter the water from a landing stage. Whilst putting her fins on she fell and injured her knee. She was taken to hospital for treatment.

September 2005 05/478

Brixham Coastguard received a call from dive support vessel reporting having a diver aboard who was feeling unwell, the vessel was met by ambulance and the casualty transferred to the DDRC for treatment. (Coastguard report).

Boating & Surface Incidents

October 2004 05/315
Dive support vessel broke down with ten divers in the water. Largs Lifeboat was tasked by Clyde Coastguard to assist. The divers were recovered by two other vessels, the stricken vessel escorted to shore by Lifeboat. (Coastguard & RNLI reports).

November 2004 05/323
Stornoway Coastguard received a 999 call from a diving group, reporting a missing diver. Stornoway Coastguard tasked rescue helicopter G-BIMU and Portree lifeboat. The diver surfaced safe and well before search units arrived on scene. (Coastguard & RNLI reports).

November 2004 05/324
Stornoway Coastguard received a call from a broken down dive boat with two POB. Kyle lifeboat was tasked to tow the vessel ashore, where she was met by Kyle Coastguard team. (Coastguard & RNLI reports).

December 2004 05/480
Two lifeboats launched to assist dive boat with engine problems and missing diver(s). Nine people landed and craft escorted in. (RNLI report).

February 2005 05/331
Clyde Coastguard received a 'Mayday' call on VHF channel 16 from a dive support vessel reporting a missing diver. Clyde Coastguard tasked Oban Coastguard team and lifeboat and RN rescue helicopter R - 177 together with other local vessels. The diver was recovered safe and well in pos 56 23.3N 005 35.08W. Following assessment by a doctor aboard the lifeboat no further medical treatment was required. (Coastguard & RNLI reports).

February 2005 05/334
Following a 999 call transferred via Falmouth Coastguard, Brixham Coastguard took details of a vessel aground. There followed a 'Mayday' call on VHF from the vessel. Brixham Coastguard tasked Looe lifeboat. The stricken dive boat managed to free herself and made own way back to port escorted by Looe LB. (Coastguard & RNLI reports).

February 2005 05/482
Lifeboat assisted in the search for missing diver(s). Others coped. (RNLI report).

March 2005 05/336
Portland Coastguard received a 999 call from a dive RHIB, reporting having broken down with a mechanical failure. No divers in the water. (Coastguard report).

March 2005 05/483
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

March 2005 05/484
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

March 2005 05/073
With four divers in the water the engine of a dive RHIB cut out after having given the cox a couple of electric shocks. The engine could not be restarted. The cox contacted the Coastguard. A hardboat took the RHIB in tow whilst another RHIB recovered their divers and transferred them to the disabled RHIB. The RHIB was towed back to the home port of the hardboat. During the return trip it was discovered that the throttle linkage had broken.

March 2005 05/338
Humber Coastguard received a call from dive support vessel requesting assistance to find her way to port following a GPS failure in poor visibility. The vessel was assisted by a DF bearing, vessel making shore safe and well. (Coastguard report).

March 2005 05/337
Brixham Coastguard received a call from a dive vessel reporting having lost her propeller, another vessel towed the stricken vessel to shore. Met by Plymouth Coastguard team. (Coastguard report).

March 2005 05/339
Portland Coastguard received a call from dive support vessel reported having broken down with two divers in the water. Exmouth lifeboat was tasked to the broken down RHIB, safety instructions were passed to the vessel to anchor, the divers surfaced, rejoined the dive boat and were able to restart the vessel's engine. The RHIB was then escorted back to port by the lifeboat where they were met by Exmouth Coastguard. (Coastguard report).

March 2005 05/485
Lifeboat launched to assist dive boat with engine problems. Craft escorted in. (RNLI report).

March 2005 05/486
Lifeboat launched to assist dive boat with engine problems. Craft escorted in. (RNLI report).

March 2005 05/487
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

April 2005 05/290
A group of divers were diving from a hardboat. The last pair were awaiting recovery when the diver lift platform at the stern of the boat failed. There was no back-up ladder on board. The weather was calm so the divers were able to await recovery.

April 2005 05/347
Dive support vessel reported having broken down with one diver in the water. Two lifeboats were tasked by Forth Coastguard, together with Leven CRT. The stricken vessel recovered diver and was escorted back to port by lifeboats. (Coastguard & RNLI reports).

April 2005 05/488
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

April 2005 05/348
Portland Coastguard received a call from a dive support vessel reporting having broken down with 5 POB. The vessel was towed to shore by a Council owned vessel, the problem was fuel starvation. (Coastguard report).

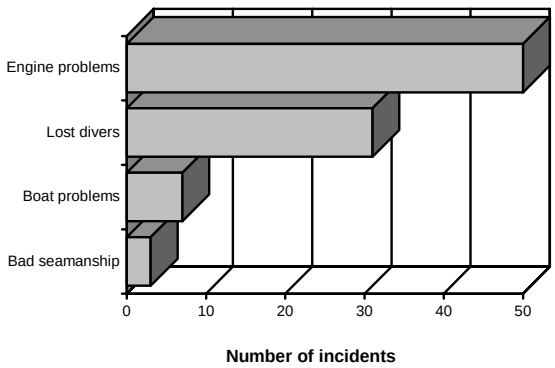
April 2005 05/489
Lifeboat assisted in the search for missing diver(s). Others coped. (RNLI report).

April 2005 05/088
A group of seven divers were diving from a hardboat. When the first pair surfaced they found that the hardboat was just visible on the horizon. An RHIB collected them, informed them that the engine of their boat had failed and returned them to the boat. The RHIB made two further trips to collect the other five divers and return them to the hardboat. Some of the divers helped the skipper to try to fix the problem. Blocked fuel lines were thought to be the cause. The skipper used his mobile phone to contact another boat from the same port. This other boat promised to return to assist, but did not do so. After drifting for 90 min the skipper deployed an anchor. The skipper of the other boat encouraged the skipper of the disabled boat to contact the Coastguard which he did. Another large RHIB and a Coastguard boat arrived on scene just as they managed to restart the engine. The boat returned safely to shore accompanied by the other two boats.

April 2005 05/351
Dive boat with one person on board made a 'Pan Pan' broadcast reporting having broken down close to rocks. Swanage lifeboat & inshore lifeboat were tasked to assist the vessel. The boat was towed to shore where they were met by Swanage Coastguard. (Coastguard report).

April 2005 05/352
Humber Coastguard tasked Craster and Seahouses lifeboats to assist a broken down dive boat with one person aboard having suffered an engine fire, the vessel was towed to shore. (Coastguard & RNLI reports).

Analysis of boating & surface incidents



May 2005 05/126
Whilst travelling to a dive site the engine of a dive boat became starved of fuel. The fuel filter and water separator were by-passed and the engine restarted and ran without problem. After their dive the party returned to a marina and a new fuel filter was fitted. The engine started and ran well. On the way to the second dive site the engine stopped again. The bulb pump in the fuel line was operated and the engine was restarted and ran without problem during the second dive. On the return journey the engine stopped a third time and could not be restarted. The Coastguard was alerted and the boat anchored. The boat was safely towed ashore by an inshore lifeboat.

May 2005 05/258
An RHIB made a 5 mile trip to a dive site with six divers on board. On route the steering system failed. A paddle was strapped to the engine in an attempt to regain steering but the paddle broke. Two divers then held the engine in a straight ahead position and two others steered the boat with their feet and fins at the bow. In this manner they made their way safely back to their launch point.

May 2005 05/493
Two lifeboats assisted in the search for missing diver(s). One person brought in. (RNLI report).

May 2005 05/363
Dive RHIB contacted Belfast Coastguard reporting having broken down with four divers in the water. Larne AWLB towed vessel to shore, where they were met by Portmuck Coastguard team. The divers had self recovered to the parent vessel. (Coastguard & RNLI reports).

May 2005 05/361
Following a 999 call to Holyhead Coastguard, a dive support vessel reporting they had broken down with seven POB, Trearddur Bay lifeboat was launched and towed the stricken vessel back to shore. (Coastguard & RNLI reports).

May 2005 05/367
Dive RHIB contacted Brixham Coastguard reporting having broken down, Plymouth lifeboat was tasked to tow the stricken vessel to shore, however the vessel restarted her engines, the vessel was escorted to shore by Plymouth lifeboat. (Coastguard report).

May 2005 05/368
Holyhead Coastguard tasked Trearddur Bay lifeboat and Rhosniger Coastguard team to investigate a report of a broken down dive RHIB, the vessel was found to have run out of fuel and towed back to shore by the lifeboat. (Coastguard report).

May 2005 05/371
Falmouth Coastguard tasked Penlee lifeboat and Penzance Coastguard team to assist a broken down RHIB with five POB, the vessel was towed to safety where the team took details and gave safety advice. (Coastguard & RNLI reports).

May 2005 05/497
Lifeboat assisted in the search for missing diver(s). Two persons landed. (RNLI report).

June 2005 05/149

Two divers entered the water and dived to a depth of 22m. After 5 min they deployed a delayed SMB. Unknown to the divers, this SMB split and was lost from sight by those in the boat. The boat crew was not able to locate the divers and after their anticipated ascent time had passed the Coastguard was alerted. Meanwhile the divers surfaced and inflated two SMBs which they used to attract the attention of those in the boat. They were recovered safely from the water and the Coastguard was informed.

June 2005 05/375

Dive support vessel was spotted as broken down from Humber Coastguard operations room, the Bridlington lifeboat was launched to tow the stricken vessel back to shore. (Coastguard & RNLI reports).

June 2005 05/500

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

June 2005 05/502

Lifeboat launched to assist leaking/swamped dive boat. (RNLI report).

June 2005 05/385

Dive support vessel whilst answering a call for assistance from a broken down jet ski, itself broke down with eleven divers onboard. Poole lifeboat responded to the vessel in difficulty and towed the dive boat to shore where it was met by Poole Coastguard. (Coastguard report).

June 2005 05/505

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

June 2005 05/504

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

June 2005 05/387

Portland Coastguard received a 999 call reporting two divers in difficulty following a shore dive. The divers were shore diving when they were taken by the tide and caused to drift away from the shore. Another vessel located them and returned the divers to shore, being met by Portland Coastguard. (Coastguard & RNLI reports).

June 2005 05/164

Two divers entered the water from an RHIB. As they descended the boat engine stopped. The boat slowly drifted from the dive site and when it was about 100m away an attempt was made to restart the engine to return to the site. It was found that there was no electrical power to the engine and it could not be restarted. The boat was paddled back to the site and secured to a mooring buoy. The Coastguard was alerted and a lifeboat and a Coastguard boat attended to assist. The divers were recovered into their own boat which was towed ashore.

June 2005 05/394

Forth Coastguard received a call from dive support vessel reporting a missing diver, RAF rescue helicopter R-131, Eyemouth lifeboat, St Abbs and Eyemouth Coastguard assisted in the search, police and ambulance also assisted. The missing diver was located safe and recovered by one vessel. (Coastguard & RNLI reports).

June 2005 05/395

Dive RHIB reported to Brixham Coastguard having broken down with five POB, the vessel was towed to shore by Teignmouth lifeboat. (Coastguard & RNLI reports).

June 2005 05/173

Two divers entered the water to dive on a wreck. Their boat was anchored on the wreck and they placed a lifting bag on the anchor to aid its recovery. The divers then planned to use a delayed SMB for their ascent. The anchor was recovered but the boat's engine could not be restarted. The anchor was redeployed but it dragged in sand and the boat was carried towards a beach. The Coastguard was alerted and two lifeboats were launched to assist. One took the disabled boat in tow and the other recovered the divers safely and returned them to their boat.

July 2005 05/400

Humber Coastguard received a call from a fishing vessel having recovered a lone diver, the diver was returned unharmed to the parent vessel, on return to shore Amble Coastguard gave safety advice to the diver who was uncooperative. (Coastguard report).

July 2005 05/507

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

July 2005 05/403

Following a 999 call Humber Coastguard were alerted to a broken down dive boat, Redcar lifeboat was tasked to assist the broken down vessel, Skinning Grove Coastguard team met the vessel to collect details. (Coastguard & RNLI reports).

July 2005 05/402

Humber Coastguard were alerted to a dive boat with seven POB having suffered total engine failure, Flamborough lifeboat was tasked to tow the stricken vessel to shore. (Coastguard & RNLI reports).

July 2005 05/508

Lifeboat launched to assist dive boat. Two persons brought in. (RNLI report).

July 2005 05/509

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

July 2005 05/169

The Coastguard was alerted that two divers were missing. Two lifeboats and a helicopter were tasked to search. The divers were spotted by another dive boat and transferred back to their own boat by a lifeboat. The divers had been in the water for about 2 hours. Neither suffered ill effects. (Coastguard & RNLI reports).

July 2005 05/407

Dive boat was reported broken down by harbourmaster, another dive vessel responded to a call broadcast by Portland Coastguard and towed to shore. (Coastguard report).

July 2005 05/404
Humber Coastguard were alerted to a broken down dive boat with five persons on board, Flamborough Inshore lifeboat was tasked to assist, towing the stricken vessel to shore, where they were met by Bridlington Coastguard team. (Coastguard & RNLI reports).

July 2005 05/510
Lifeboat assisted in the search for missing diver(s). One person found. (RNLI report).

July 2005 05/511
Lifeboat assisted in the search for missing diver(s). Others coped. (RNLI report).

July 2005 05/410
Portland Coastguard received a call from a dive boat reporting having broken down with divers in the water, Portland Coastguard initiated broadcast action for the stricken vessel, another dive boat responded picking up the adrift divers returning them to the parent vessel, the vessel then managed to restart its engines and return to shore unaided. (Coastguard report).

July 2005 05/512
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

July 2005 05/415
A 999 call was received by Portland Coastguard reporting a missing diver, Coastguard rescue helicopter R-WB Weymouth AWLB and Portland Bill Coastguard were tasked to search for the missing diver, a second 999 call reported the diver had been located safe and well, all units stood down with the Coastguard team gathering details, it transpired the diver had drifted away from the group. (Coastguard report).

July 2005 05/216
Two divers became separated from their boat in rough sea conditions. A person on shore saw them in the water and alerted the Coastguard. A lifeboat and a helicopter were tasked to assist. One diver made it to the shore and the other was recovered by another dive boat. Neither diver suffered ill effects. (Media report).

July 2005 05/418
Dover Coastguard received a call from a dive boat reporting a missing diver following a dive to 50m, the diver was recovered by parent vessel, no medical treatment was required. (Coastguard report).

July 2005 05/421
Forth Coastguard received a call from diving RHIB reporting having a missing diver, the diver made a slow ascent and was picked up by parent vessel, all SAR units were stood down. (Coastguard & RNLI reports).

July 2005 05/219
The Coastguard was alerted when a dive boat began to take on water. A lifeboat was launched to assist but, despite using two pumps they were unable to prevent the boat from sinking. The divers were brought safely back to shore by the lifeboat. (Coastguard report).

July 2005 05/190
The Coastguard was alerted when two divers were overdue from a dive. A Coastguard tug, a fixed wing aircraft and a lifeboat were tasked to search. After 8 min the lost divers were found, at the surface, by the tug and safely recovered. (Coastguard report).

July 2005 05/427
A dive RHIB suffered engine failure following a fire in the thermostat area of the engine compartment, once the fire had been extinguished the vessel was towed to shore by another vessel. (Coastguard report).

July 2005 05/429
Stornoway Coastguard received a call from Mallaig Station Officer reporting dive support vessel broken free from its moorings and had a line around its propeller, the vessel was held offshore by the Mallaig Coastguard team until a diver freed the propeller, the vessel was then taken alongside and secured. (Coastguard report).

August 2005 05/301
A group of divers left their dive site to return to the shore. About 300m into the journey the engine stopped and could not be restarted. The boat was anchored and the Coastguard was alerted. A lifeboat was tasked to assist and the boat was towed ashore. It was later found that the switch that controlled the electric choke on the engine had been inadvertently moved to the choke position and the engine was flooded.

August 2005 05/514
Lifeboat assisted in the search for missing diver(s). Two persons brought in. (RNLI report).

August 2005 05/431
Milford Haven Coastguard were alerted to a missing diver, immediately tasking Tenby lifeboats and Tenby Coastguard, the missing diver was located on rocks by a range safety vessel, the diver had deployed his delayed SMB but had drifted away from the support vessel. It was noted that the diver's gear was in good order but the dive boat equipment was very poor. (Coastguard report).

August 2005 05/432
Humber Coastguard received a call from dive support vessel reporting having broken down with five POB, Scarborough lifeboat was launched, towing the stricken vessel back to shore where she was met by Scarborough Coastguard. (Coastguard report).

August 2005 05/434
Portland Coastguard received a 999 call from a member of the public reporting seeing a red smoke flare, the report was investigated by Portland Coastguard who established the divers were adrift from the parent vessel and activated the flare to alert other vessels. The divers were recovered by the parent vessel. (Coastguard report).

August 2005 05/435
Milford Haven Coastguard received a call on VHF from a dive support vessel reporting having broken down with divers in the water, a request for assistance was broadcast by Milford Haven Coastguard, another vessel responded recovering all divers and returning them to shore, the parent vessel restarted its engine and also returned to shore. (Coastguard report).

August 2005 05/442

Humber Coastguard received a call from dive boat reporting having broken down, Whitby lifeboat was tasked to tow the vessel to shore, the vessel was able to restart its engine and was escorted back to shore by the lifeboat. (Coastguard & RNLI reports).

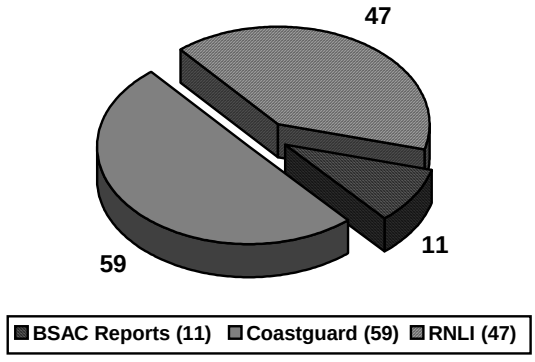
August 2005 05/221

Two divers completed a dive to a depth of 42m. When they surfaced they were not seen by their boat which moved away from them. The divers sounded a horn but this was not heard. Once it was realised that the divers were overdue the Coastguard was alerted and a search involving a helicopter and a number of lifeboats was initiated. After about 20 min the divers were spotted by the helicopter about 3 miles from their start point. The divers were safely recovered into the helicopter.

August 2005 05/212

A number of divers were ascending a shotline from a dive to 27m when a large tug was seen to be heading directly for the site. The skipper of the dive boat attempted to divert the approaching vessel by steering towards it and by radio calls. The vessel did not respond and passed directly over the shot buoy at high speed. One of the divers was pulled upwards and hit by the hull of the tug several times. She managed to get to the surface after the incident and was recovered into her boat. She was in pain and parts of her diving equipment had been damaged or lost. The pillar valve of her cylinder was bent over and leaking. The Coastguard was alerted and the other divers recalled. The boat headed back to the shore and was met by a lifeboat. The casualty was taken ashore by the lifeboat and from there to hospital. She was treated for three broken ribs, bruising to her lung, injuries to her arm and facial cuts.

Boating & surface incident report source analysis



August 2005 05/450

Milford Haven Coastguard received a call from dive boat reporting having broken down with five divers in the water, a broadcast was made on behalf of the vessel, other vessels responded to the call, recovering the divers and towing the boat to shore where they were met by Dale Coastguard. (Coastguard report).

August 2005 05/452

Humber Coastguard received a call from a dive support vessel reporting having broken down, Seahouses lifeboat and ILB proceeded, the vessel was towed back to shore where it was met by Seahouses Coastguard. (Coastguard report).

August 2005 05/451

Humber Coastguard received a 999 call reporting a red flare, Bridlington lifeboat was tasked to investigate the report, the casualty was a dive support vessel broken down (out of fuel) with divers in the water, the vessel was towed back to shore by the Bridlington lifeboat. (Coastguard report).

August 2005 05/242

A group of divers were recovered into their boat and the cox attempted to start the engine to make the return journey. Despite several attempts the engine could not be started. The Coastguard was informed and the boat was anchored. A lifeboat was on exercise nearby and came to their assistance. The disabled boat was towed safely ashore. A faulty electrical connection was later found.

September 2005 05/463

Forth Coastguard received a call for a dive RHIB reporting having run aground in thick fog, Anstruther AWLB and inshore lifeboat were tasked to assist the stricken vessel with Carnoustie Coastguard attending, no medical assistance was required. (Coastguard report).

September 2005 05/461

Brixham Coastguard received a call from two dive support vessels reporting a dangerous occurrence when a power boat steamed right through a dive site with divers in the water, both dive boats were displaying the dive flag when the power cruiser went right through the area in excess of 32 knots. A Hazrep has been completed. (Coastguard report).

September 2005 05/464

Dive RHIB contacted Portland Coastguard reporting having engine failure and was in danger of running aground, Poole lifeboat was tasked to tow the vessel to safety where they were met by Poole Coastguard. (Coastguard report).

September 2005 05/466

Numerous 999 calls reporting a flashing torch offshore were investigated by Coastguard helicopter, the flashing was from a diver who had become lost offshore, the diver was assisted ashore by a swimmer and a canoeist where they were met by the helicopter winchman and Wyke Coastguard. (Coastguard report).

September 2005 05/468

Dive support vessel reported having broken down with seven divers in the water, another vessel recovered some of the divers and the parent vessel recovered the remaining, the dive boat was towed safely to shore by a local vessel. (Coastguard report).

September 2005 05/469

Belfast Coastguard reported on channel 16 that they had a missing diver, Belfast Coastguard tasked Redbay lifeboat and Ballycastle Coastguard to assist in the search for the missing diver, the casualty was recovered safe and well shortly afterwards by the parent vessel. (Coastguard report).

September 2005 05/471

Dive vessel broke down with divers aboard, Yarmouth Coastguard tasked Skegness lifeboat to recover the divers and tow the vessel to safety. (Coastguard report).

September 2005 05/472

Portland Coastguard received a call from a dive RHIB reporting having broken down with one diver in the water, the dive boat was recovered by the Swanage lifeboat and towed back to shore by a fisheries protection vessel, the lifeboat recovered the diver unharmed. (Coastguard report).

September 2005 05/477

Brixham Coastguard were alerted to a missing diver by the beach manager at Breakwater Beach. Three divers entered the water in poor underwater visibility. One instructor and two trainees, when the instructor lost the others in the party they panicked, the missing diver surfaced unaware of the problem, was safe and did not require any medical assistance. (Coastguard report).

Ascents

October 2004 05/316

Clyde Coastguard received a call form dive support vessel reporting having two divers aboard having missed stops following a dive to 38m. Following medical advice, Oban lifeboat recovered the divers and they were transferred to a waiting ambulance for transfer to hospital. (Coastguard & RNLI reports).

October 2004 05/021

A pair of divers conducted a dive to a maximum depth of 32m. During their ascent, at a depth of 22m, the drysuit inflator of one of the divers stuck in the open position. He disconnected the hose but was unable to prevent a buoyant ascent to the surface. His dive time was 22 min. He was placed on oxygen and no ill effects were noted.

November 2004 05/321

Stornoway Coastguard received a 999 call requesting medical assistance for a diver having made a rapid ascent. A medi-link call was made to a diving doctor and the diver was advised to continue oxygen for a further hour and a half, no further action. (Coastguard report).

November 2004 05/023

Two divers conducted a dive to a maximum depth of 35m. One of the pair was underweighted and took some time to pull himself down the shotline against a slight current. His buddy waited for him at the bottom. Underwater visibility was 2m and it was dark on the wreck at 35m; both felt that they were suffering from nitrogen narcosis. After 18m they stopped to deploy a delayed SMB. The under-weighted diver then realised that he had forgotten to switch to the second cylinder of his twin-set. He took the regulator from his second cylinder but then dropped it. He held the SMB for the other diver to inflate. They launched the bag and the under-weighted diver then found himself ascending. He grabbed hold of his buddy and gave him the reel, indicating that he should reel in. The diver then realised that he had still not switched cylinders and was concerned that he would run out of air. He became entangled in the buoy line and took hold of his buddy to try to pull himself down. He was inverted and both divers were tangled in the line. They made a buoyant ascent to the surface missing 7 min of decompression stops. Their total dive duration was 23 min. They were recovered into the boat and placed on oxygen. An hour later no symptoms were present. The Coastguard was alerted and the divers were airlifted to a recompression facility where they received precautionary recompression treatment.

November 2004 05/013

Three divers were engaged in a dive to a maximum depth of 22m. At 14m, 9 min into the dive, the weightbelt of one of the three fell off. One of his buddies took hold of him and the diver became inverted. He was unable to dump air from his suit and both made a buoyant ascent to the surface. The third diver realised that his buddies were missing, saw the weightbelt, and made a normal ascent. Once back in the boat, the diver who had been inverted complained of a feeling of 'pins and needles' and was placed on oxygen. The Coastguard was alerted and the boat returned to shore, escorted by a lifeboat. The diver and his buddy were taken by ambulance to hospital but no problems were found and both were discharged that day.

November 2004 05/028

Two divers conducted a dive to a maximum depth of 36m. During the ascent, at a depth of 20m, one of the pair lost control of his buoyancy and made a rapid ascent to the surface. His dive duration was 20 min. No subsequent ill effects were experienced and no further action was taken.

December 2004 05/479

Clyde Coastguard received a 999 call from a diver reporting his buddy having made a rapid ascent from 40m, Clyde Coastguard made a medi-link call to a diving doctor recommending immediate evacuation to a recompression facility, Clyde Coastguard requested the launch of RAF rescue helicopter, Cumbrae and Inverery Coastguard teams also tasked to assist. Casualty airlifted to a waiting ambulance for transportation to the chamber. (Coastguard report).

December 2004 05/030

Two divers conducted a dive to a depth of 25m. At this depth, one of the pair lost control of the buoyancy of her drysuit and made an uncontrolled ascent to the surface. She was placed on oxygen. No subsequent ill effects were experienced.

January 2005 05/045

Two divers conducted a dive to a maximum depth of 36m. At 18m they lost control of their buoyancy and made a rapid ascent to the surface. Their computers indicated that 4 min of decompression stops had been missed. They were placed on oxygen. No subsequent ill effects were reported.

January 2005 05/076

A trainee and two instructors entered the water to conduct controlled buoyant lift training. They exchanged OK signals and descended to 7m. OK signals were exchanged again and one of the instructors demonstrated on the other. The trainee was then signalled to practice the skill. The trainee took hold of the instructor to be lifted but then she spat out her mouthpiece and started to swim for the surface. The other instructor caught hold of the student and placed his alternative air source in her mouth. She would not breathe from this regulator and she made an uncontrolled buoyant ascent from 5m to the surface. She was assisted from the water. 24 hours later the trainee complained of dizziness and advice was sought from a recompression facility. No treatment was recommended and she subsequently made a full recovery. The trainee reported that she had been breathing an air/water mix throughout the dive. The regulator was brand new and this was its first use.

January 2005 05/038

A pair of divers conducted a dive to a maximum depth of 27m. 20 min into the dive they deployed a delayed SMB and began their ascent. One diver held the reel and wound in the line, the other held the line above the reel. At a depth of 17m the ascent rate began to increase. The diver holding the line attempted to slow the ascent but the diver with the reel was unable to dump air from her BCD and became increasingly buoyant. She made an uncontrolled ascent to the surface, her buddy deployed a second delayed SMB and made a normal ascent. The buoyant diver was recovered into the boat and placed on oxygen. Medical advice was sought. No subsequent ill effects were reported. It was thought that the problem was due to the diver's lack of familiarity with her BCD controls.

January 2005 05/330

Clyde Coastguard received a call from a dive support vessel reporting having a diver aboard having missed decompression stops. Cumbrae Coastguard rescue team was tasked to assist the transfer of the casualty to a recompression chamber, and then on to hospital for observation. (Coastguard report).

February 2005 05/053

A pair of divers was preparing to dive from an RHIB. One of the pair found that his BCD inflator was stuck in the 'on' position so he decided to dive using his suit buoyancy alone. They dived to a maximum depth of 22m. The diver with the inflator problem had problems with his fin straps and had to keep adjusting them. He led the dive following a compass course. At 18m he stopped to adjust his fin again and, whilst doing so, began to ascend without realising that he was doing so. His buddy took hold of him and attempted to slow the ascent. The buoyant diver dumped air from his suit, but not enough. His buddy was unable to prevent the diver from making an uncontrolled buoyant ascent to the surface. His dive duration was 15 min. The buddy deployed a delayed SMB and made a normal ascent. Both were recovered into the boat. The diver who had made the uncontrolled ascent was given water and placed on oxygen. Advice was sought from a recompression facility and as his time at depth had been only 12 min it was agreed that he should return home. No symptoms of DCI developed.

February 2005 05/056

An instructor and two trainees were involved in a nitrox course. They descended a shotline to a depth of 16m. One of the trainees was slow to descend. On the seabed they moved away from the shotline and the instructor demonstrated the deployment of a delayed SMB. The instructor then demonstrated a gas switch and each trainee in turn practiced the drill. Whilst one trainee practiced the other held the SMB reel. During this exercise the diver who had been slow to descend experienced buoyancy problems. They then swam off to conduct the rest of their dive. 1 min later the instructor asked one of the students to repeat the gas switch drill; whilst they were doing so the other trainee, who had had the buoyancy problems, began to float to the surface. The instructor gave him the SMB line to retain contact. This trainee was carried to the surface. The instructor and the second trainee made a normal ascent. All were safely recovered into their boat and no subsequent ill effects were experienced.

February 2005 05/059

A diver was at his maximum depth of 9m when he lost a fin. This resulted in an uncontrolled ascent to the surface. His dive duration was 20 min. He was placed on oxygen for 15m. He had a mild tingling in his knees and spat out some blood. Apart from this he was apparently unharmed and no further action was reported.

February 2005 05/077

A diver completed a dive to a maximum depth of 38m. She started her ascent and made a 4 min stop at 14m and a 3 min stop at 11m. At 10m she had problems with too much buoyancy. She was unable to dump more air and she made an uncontrolled ascent to the surface, missing an indicated 9 min of decompression stops. She was recovered into the boat, placed on oxygen and given fluids to drink. The Coastguard was alerted and a lifeboat was launched to assist. The diver's buddy had completed all his stops but both were kept on oxygen and taken to a hyperbaric facility. The diver who had made the buoyant ascent was found to be symptom-free and no further action was required.

March 2005 05/043

A diver conducted a 32 min dive to a maximum depth of 35m. He spent 5 min at the maximum depth and then made a slow ascent to 6m. He then made a rapid ascent to the surface. Later he made a second dive to 34m for a total duration of 29 min. He spent 2 min at the maximum depth and then made a slow ascent to 6m. At a depth of 24m he began to experience problems with buoyancy control and he realised that the cuff dump of his drysuit was jammed. He dumped all the air from his drysuit and used his BCD to control his buoyancy. He lost control of his buoyancy at 6m and made a rapid ascent to the surface. He later realised that the faulty cuff dump had been the cause of his first buoyant ascent. He was taken to a recompression facility from treatment, but no symptoms of DCI were reported.

March 2005 05/097

Two divers were at a depth of 35m when the regulator of one of the pair started to free flow. He went for his buddy's alternative air source but the buddy's regulator began to free flow too. They made a fast ascent to the surface. Their dive duration was 11 min. The water temperature was 4 deg C. They were given oxygen as a precaution but no subsequent ill effects were experienced.

March 2005 05/065

A diver conducted a 38 min dive to 26m with a 5 min stop at 6m. 2 hours 10 min later he dived to 22m and stayed at this depth for about 15 min. He became very cold and, with his two buddies, he ascended to 12m. At this depth he lost control of his buoyancy and rose to the surface. He re-descended to join his buddies. They continued the dive. They rose to 6m where they stayed for 5 min and then surfaced. The following day this diver complained of a pain in his shoulder and was advised to seek advice from a recompression facility. He was recompressed but the conclusion was that the pain was due to an old injury. The diver thought that his undersuit had provided more buoyancy than he had planned for.

March 2005 05/067

During the ascent from a dive, one of a pair of divers lost a fin. They subsequently lost control of their buoyancy and made a rapid ascent to the surface. The Coastguard was alerted and a doctor on a nearby boat was able to assist them and provide them with oxygen. A lifeboat and a helicopter were tasked to assist. The divers were airlifted to a recompression facility for treatment. (Coastguard & RNLI reports).

March 2005 05/068

Three divers conducted a dive to a maximum depth of 22m. At the end of the dive one of the three started to deploy a delayed SMB. During this process she realised that she only had 50 bar remaining and the SMB deployment was abandoned. She then realised that she was underweighted and attempted to pick up some rocks to compensate. Whilst doing so she ran out of air. She was unable to use her buddy's alternative air source and she swam towards the surface. One of her buddies went with her. They were recovered into their boat and placed on oxygen. The Coastguard was alerted and medical advice was sought. Both divers were airlifted to a recompression facility but no treatment was found to be necessary. The third diver surfaced normally.

March 2005 05/098

Two divers dived to a maximum depth of 35m. They were just about to start their ascent when one of the pair swallowed some water. This caused her to panic and she made a rapid ascent to the surface. Her dive duration was 23 min. She was taken

by ambulance to hospital from where she was discharged 3 hours later with no subsequent ill effects.

March 2005 05/105

A pair of divers descended to 11m at which point one of the divers' regulators began to free flow. There was some confusion and they made a rapid ascent to the surface. At the surface, the diver with the free flow then had difficulties with his BCD and called for help. This diver's computer was also discovered to have failed during the dive. The water temperature was 6 deg C. No subsequent ill effects were reported.

March 2005 05/107

Three divers conducted a dive to a maximum depth of 25m. At 24m one of the three became too buoyant and partially inverted. The other two divers managed to right her and make her neutrally buoyant. One of the other divers then deployed a delayed SMB and they began their ascent. Again the diver became buoyant and she hung onto the buoy line to slow her ascent. This began to drag the diver holding the reel upwards so he released some line. The buoyant diver then made an uncontrolled, rapid ascent to the surface. The others made a normal ascent. The buoyant diver was placed on oxygen and the boat returned to shore. Once ashore they contacted the Coastguard and an ambulance was called. The diver was taken to hospital but released without problem some hours later. This diver had a new thick undersuit and it is thought that this may have blocked the drysuit dump valve. She now uses ankle weights

March 2005 05/341

Portland Coastguard was contacted by Harbourmaster expressing concern for a female diver who had made an ascent from 20m but having held her breath during the last 4m. A paramedic examined the diver requesting an airlift to evacuate the diver to a recompression chamber for treatment. The casualty was taken out to sea by Lyme Regis lifeboat. The landing site and incident attended by Poole, Wyke and Lyme Coastguard. (Coastguard report).

March 2005 05/081

Two divers conducted a wreck dive to a maximum depth of 22m. After 20 min they ascended to a depth of 10m. After a further 10 min they prepared to deploy a delayed SMB. Whilst doing so, one of the divers developed cramp in her right leg and started to panic a little. Their situation was exacerbated by an increasing surge in the water. The diver with cramp let go of the wreck to attend to the problem and she was carried buoyantly towards the surface. Her buddy caught hold of her at a depth of 3m and managed to swim back down to 7m. The diver with cramp was unable to get her drysuit dump valve to release any air and her buddy could not hold on to her. She made a rapid buoyant ascent to the surface. Her buddy followed. Their total dive time was 32 min. They were recovered into the boat and placed on oxygen. The Coastguard was alerted and the boat returned to shore having recovered two other pairs of divers. Once ashore further medical advice was sought and the divers were taken to a recompression facility. The diver who had had cramp had a slight ache in her right elbow and her buddy had a slight tingling in his feet. Both divers were given a precautionary recompression treatment, although it was later concluded that neither had suffered a DCI.

March 2005 05/082

A diver dived to a maximum depth of 31m. He then followed a sloping seabed upwards. Whilst swimming up the slope the diver began to become too buoyant. At 20m he was unable to dump more air and he made a buoyant ascent to the surface. Another diver helped him to the shore and it was found that he had missed a 2 min decompression stop. He was placed on oxygen and the Coastguard was alerted. The diver was taken by helicopter to a recompression facility and kept on oxygen for 6 hours. No treatment was required. It was later found that the diver was underweighted and that a new undersuit had caught in the dump valve.

April 2005 05/344

Portland Coastguard received a call from dive boat reporting having a diver aboard who had made a rapid ascent from 27m. Coastguard rescue helicopter R-IJ was tasked to airlift the diver and transport to the HLS where they were met by Poole Coastguard and an ambulance. (Coastguard report).

April 2005 05/289

Two divers descended a line to a depth of 20m. They then swam mid-water following a compass bearing. As they swam they descended deeper than intended to a depth of 32m. They then re-ascended to 24m and continued. They swam towards a cliff wall and this caused a panic attack in one of the divers, which he believed was due to narcosis. He swam up the cliff to a depth of 12m at which point he tried to regain control. He dumped air and started to sink, he then re-inflated his BCD and rose to the surface, hyperventilating all the way. His buddy had lost contact with him and he too came to the surface faster than normal. At the surface the diver who had been panicked felt dizzy and had a headache. He was recovered from the water, placed on oxygen and given fluids. The buddy was also placed on oxygen. No subsequent ill effects were experienced.

April 2005 05/108

Two divers conducted a dive to a depth of 22m. One of the divers developed buoyancy problems and made an uncontrolled ascent to the surface. He was given oxygen as a precaution. No subsequent ill effects were experienced.

April 2005 05/110

Three divers descended to a depth of 35m. One of the three developed a problem with his mask and made a rapid ascent to the surface. He was placed on oxygen and an ambulance was called. He suffered no ill effects and was not taken to hospital.

April 2005 05/176

Two divers conducted a dive to a maximum depth of 25m. It was cold and dark at depth, one diver was nervous and both were breathing heavily. After 20 min, the dive leader gave the ascend signal and held onto some wreckage whilst deploying a delayed SMB. On letting go of the wreckage the diver began to ascend rapidly and his buddy followed. Both made a rapid ascent directly to the surface. Their dive duration was 25 min. Both were recovered into their boat and one of the pair was given oxygen. No further action was reported.

April 2005 05/291

Two divers undertook their first freshwater dive. They swam to a platform to make their descent. One of the divers was tired and cold by the time they reached the platform. As they started their descent the visibility was low and the diver who was tired became very uncomfortable and signalled for her buddy to get closer to her. She then started to hyperventilate. She signalled to her buddy to ascend but they were heavy and sinking. Her buddy signalled for her to inflate her BCD but she did not do so. The buddy swam down to her and took hold of her. He inflated his BCD and the descent stopped at about 15m. They then

started a fast ascent. The buddy dumped too much air and they started to sink again. This cycle was repeated. The troubled diver then accidentally released the buddy's weightbelt. The buddy did not realise this and decided to put air into his BCD to bring them to the surface. They made a rapid ascent to the surface, where the buddy gave the emergency signal. They were recovered from the water. Neither diver suffered any subsequent ill effect.

April 2005 05/113

Two divers descended to a depth of 21m. At this point one of the divers' regulators began to free flow. She made a fast ascent to the surface. Her dive duration was 5 min. At the surface she ditched her BCD and cylinder. She was recovered from the water and placed on oxygen. No subsequent ill effects were experienced. The water temperature was 8 deg C.

April 2005 05/118

Two divers dived to a maximum depth of 27m. When they started their ascent one of the pair had 100 bar remaining in a 12l cylinder. They ascended to 12m at which point this diver ran out of air. He took his buddy's pony regulator and they continued up to 6m. One of their computers indicated 7 min to surface. The diver who was out of air then lost control of his buoyancy. The other diver dumped air but was unable to prevent them from being carried to the surface. One of their computers indicated that 3 min of stops had been missed. Their dive duration was 35 min. They were recovered into the boat and monitored. No subsequent ill effects were reported.

April 2005 05/117

Two divers dived to a maximum depth of 22m. They tried to deploy a delayed SMB to make their ascent but had problems doing so. One of the pair was low on air and had difficulty with their ascent. At 3m this diver lost their regulator and exhaled for the rest of the ascent, which was rapid. Their dive duration was 15 min. At the surface this diver was distressed. They were both given oxygen. No subsequent ill effects were reported.

April 2005 05/115

A pair of divers conducted a dive to a maximum depth of 22m. They made their ascent by following a sloping contour towards the surface. At 12m one of the divers lost control of his buoyancy and took hold of his buddy. Both divers then made a rapid buoyant ascent to the surface. Their dive duration was 27 min. Both were placed on oxygen. No subsequent ill effects were experienced.

April 2005 05/114

Two divers descended to a depth of 20m. At this point one of the divers' regulators began to free flow. He made a fast ascent to the surface. His dive duration was 7 min. He was placed on oxygen. No subsequent ill effects were experienced. The water temperature was 8 deg C.

April 2005 05/090

A pair of newly qualified divers was conducting a dive to a maximum depth of 13m. 18 min into their dive they moved over an underwater obstacle at a depth of 9m. At this point one of the pair lost control of his buoyancy and began to rise to the surface. He was attached to his buddy by a buddy line and, despite the buddy's efforts to stop the ascent, they were both carried to the surface. The divers left the water and were monitored for symptoms but none were reported.

April 2005 05/192

Two divers were conducting a dive. One diver's computer read 18m and the other's 23m. One of the pair panicked and rushed for the surface. He was wearing a semi-drysuit and was suffering from mild hypothermia. The water temperature was 5 deg C. He was placed on oxygen. He suffered no subsequent ill effects.

April 2005 05/120

Two divers conducted a dive to a maximum depth of 17m. One of the pair was too buoyant and picked up a large rock to compensate. At the end of the dive, whilst deploying a delayed SMB, the pair made an uncontrolled ascent to the surface. Their dive duration was 27 min. They were recovered into the boat and placed on oxygen. The Coastguard was alerted. The divers were monitored for symptoms but no further action was required.

April 2005 05/171

Three divers were conducting a dive to a maximum depth of 18m. One swam ahead of his buddies. Then both his main and his octopus regulators began to free flow. He made a fast ascent to the surface still breathing from one of his regulators. His dive duration was 10 min. He was assisted from the water and placed on oxygen. He suffered no ill effects.

May 2005 05/121

A diver conducted a dive to a depth of 30m. Towards the end of the dive he deployed a delayed SMB. Whilst doing so he began to ascend. He had reached 15m by the time he had controlled his ascent. He only had 40 bar remaining. He ascended to his decompression stop by which time he was down to 20 bar. He realised that he did not have enough air to complete the stop safely so he ascended to the surface having missed a 1 min stop. His dive duration was 28 min. He was placed on oxygen. No symptoms developed and no further action was taken.

May 2005 05/353

Dive support vessel reported having two divers aboard having made a rapid ascent while deploying the delayed SMB. The divers were administered oxygen and then nitrox after the oxygen was exhausted. Medical advice was sought from DDRC, the advice was to monitor the divers, no recompression treatment necessary. (Coastguard report).

May 2005 05/356

Portland Coastguard received a call from dive boat reporting having a diver aboard who had made a rapid ascent following a problem in deploying her delayed SMB. The casualty was recovered by Coastguard rescue helicopter R-WB, with Dorset police RHIB also in attendance. The helicopter was met at the HLS by Poole Coastguard, the police, and a waiting ambulance for transporting to the chamber. (Coastguard report).

May 2005 05/194

A diver under training conducted a 20 min dive to 29m. Over 4 hours later he dived to 18m. During this dive he began to feel dizzy, he inflated his BCD and made a fast ascent to the surface. His dive time was 11 min. He was placed on oxygen and experienced no subsequent ill effects.

May 2005 05/131

Three divers descended to a wreck at a depth of 20m. One of the divers became inverted and her feet came out of her drysuit boots leaving her without the use of her fins. She hung onto the

wreck. Her buddies righted her but were unable to get her feet back into her boots because of the water pressure. The diver was unable to fin and one of her buddies started to assist her to the surface. He failed to inflate her BCD since he pressed the button on her audible alarm in error. He then used his own buoyancy to make the ascent. At 9m they lost control of their buoyancy and made a rapid ascent to the surface, missing 1 min of decompression. The third diver followed at a more normal rate. The group was recovered into their boat and the two who had made a rapid ascent were placed on oxygen. No subsequent ill effects were experienced and no further action was taken.

May 2005 05/193

A diver completed a 16 min dive to 7m. 1 hour later he dived to 7m for 11 min. About 90 min later he dived again, with two others, to 20m. During this dive he started to cough and water entered his mask, this caused him to panic and he made a fast ascent to the surface. One of this buddies tried to control the ascent. Both divers were given oxygen. No subsequent ill effects were experienced.

May 2005 05/364

Following a 'Pan Pan' call from dive support vessel, Humber Coastguard tasked RAF rescue helicopter R-131 to airlift two divers from the vessel for transportation to recompression chamber for treatment following a rapid ascent. Assisted by Amble and Hull Coastguard teams. The casualties were finally transported to the recompression chamber by ambulance. (Coastguard report).

May 2005 05/142

Two divers were ascending from a dive to a maximum depth of 30m. At 12m one of the pair prepared a delayed SMB for deployment. He was using a rebreather and he used the rebreather's alternative regulator as the air source. He had to twist this regulator around to get it to fit into the buoy. When he operated the regulator valve he felt himself begin to rise. He dumped air from the rebreather through his nose but this did not stop the ascent. He released the buoy and confirmed that his drysuit was fully vented. Soon he was unable to breath from the rebreather and he switched to the open circuit alternative air source. He ascended from 12m to the surface in 1 min. He was recovered into the boat and started to breath 70% oxygen from his rebreather. This became uncomfortable and he stopped. No symptoms were experienced and no further action was taken. He subsequently believes that he had partially inflated the rebreather's wing whilst trying to inflate the buoy.

May 2005 05/264

Two divers completed a 36 min dive to 21m. 4 hours later they dived to 17m. During this dive one of the pair noticed her weightbelt was slipping and she settled onto the seabed to resolve the problem. Her buddy held the weightbelt on to her while she attempted to adjust it. The silt became stirred up and the diver with the loose belt began to panic a little. She signalled that she wanted to ascend. Her buddy held onto the diver and her weightbelt and they began to ascend. At 8m the ascent stopped and the buddy put air into his suit and BCD to restart the ascent. The ascent became rapid and they rose directly to the surface. They were recovered into their boat and placed on oxygen. No subsequent ill effects were experienced.

May 2005 05/260

A diver conducted a dive to a maximum depth of 35m. He deployed a delayed SMB to make his ascent but when he got to 11m he realised that the SMB had been inadequately inflated and he had to redeploy it. At 6m he had 6 min of decompression to complete and only 50 bar in his main cylinder. He prepared his pony cylinder but discovered that the regulator had become disconnected and the A clamp screw was missing. He completed 4 min of decompression and then surfaced with 10 bar remaining. Once back on the boat he was sick. He thought this was due to inhaling diesel fumes. He was placed on oxygen for 10 min. No symptoms developed and no further action was taken.

May 2005 05/200

Two divers were on a training course at a depth of 21m when one of the pair lost 4 kg of weight from the pocket of her integrated weight system. She made a rapid ascent to the surface. Her dive duration was 10 min. She was placed on oxygen. No subsequent ill effects were experienced.

May 2005 05/177

Two divers entered the water to dive on a wreck at a maximum depth of 37m. They planned a no-stop dive but agreed that they might extend the dive time if conditions were favourable. During the dive they extended the dive to 20 min resulting in a requirement for 5 min decompression at 3m. At the end of the dive they deployed a delayed SMB and began their ascent. One of the divers dumped air from her drysuit at the beginning of the ascent and this made her negatively buoyant. She had to fin hard to ascend. Her buddy indicated that she should put some air into her suit but narcosis prevented her from doing so. At the start of the ascent she had 100 bar in a 12l cylinder. By the time she reached 30m her contents gauge indicated 50 bar and she began to panic. Her buddy put some air into her drysuit to assist her. At 28m the buddy made his octopus regulator available. The negatively buoyant diver ran out of air and took the buddy's main regulator; he switched to his octopus regulator. The regulator hoses were twisted and they attempted to swap but ended up with the buddy using his octopus regulator again. 14 min of decompression requirements were indicated by the buddy's computer. The buddy took the decision to go straight to the surface and they rose to the surface from 28m in 1 min. Their total dive duration was 29 min. At the surface they gave the emergency signal and were quickly recovered into their boat. Both divers were given oxygen and fluids. Once ashore they were taken to hospital by ambulance. No symptoms were experienced and they were discharged later that day.

May 2005 05/296

A diver conducted a dive to 43m using nitrox 25. After 23 min he ascended to 6m to conduct a 3 min stop. He then experienced buoyancy problems and started to rise. He went back down to 8m and re-ascended but he started to rise again. He surfaced having missed a 22 min stop at 3m. He was recovered into the boat and placed on oxygen. The Coastguard was alerted and the diver was airlifted to a recompression facility. He was given precautionary recompression therapy but suffered no symptoms of DCI.

June 2005 05/202

An instructor and a trainee were involved in an advanced training session at a depth of 35m. The trainee became unsure, grabbed the instructor and made for the surface. The instructor attempted to control the ascent but they rose faster than normal to the surface. Both divers were placed on oxygen. No subsequent ill effects were experienced.

June 2005 05/182

Two divers conducted a wreck dive to a maximum depth of

38m. During the dive the pair became separated. One diver suffered a free flow and was assisted by two other divers. The other member of the pair looked around for his buddy and then made his way back up the wreck. At 17m he deployed a delayed SMB. The reel jammed and the diver made a rapid ascent to the surface missing a planned safety stop. At the surface he saw his boat engaged in recovering his buddy and two other divers. He was recovered into the boat. He felt seasick. He was airlifted to a recompression facility with the other three divers and given precautionary recompression treatment. (Report 05/181 relates).

June 2005 05/181

Two divers conducted a dive to a maximum depth of 38m. They worked their way around a wreck and, at a depth of 30m, one of the pair had a contents gauge reading 50 bar held in front of him. Initially he thought that it was his buddy but then discovered that it was a diver from another pair in his dive group. He gave this diver his octopus regulator. The diver had become separated from his buddy and had then suffered a regulator free flow. The air donor's buddy then turned him round to show him that his weightbelt had come off and he was holding it in his hand. The action of turning him round pulled the regulator from the other diver's mouth; this diver started to panic. The diver who was giving the air replaced the mouthpiece in the diver's mouth and calmed him down. His own buddy then turned him back again, he too was in a state of panic having had his regulator knocked from his mouth by the panicking diver. The diver giving air replaced his buddy's regulator. They had been ascending slowly and at 15m the donor diver had dumped all the air from his suit but he was unable to get the other divers to control their buoyancy and they made a rapid ascent to the surface missing decompression stops. The dive duration of the original dive pair was 12 min. The three divers were recovered into their boat and placed on oxygen. The Coastguard was alerted and the divers were airlifted to a recompression facility where they were given precautionary recompression treatment. None of the divers developed any symptom of DCI. (Report 05/182 relates).

June 2005 05/379

Following a dive to 32m one diver ran out of air and made a rapid ascent, both divers surfacing together, 45min after the ascent the vessel called Portland Coastguard and a medi-link call was established with a diving doctor, the doctor advised that the treatment given, oxygen, was appropriate. (Coastguard report).

June 2005 05/204

A diver conducted a 40 min dive to a depth of 22m. 3 hours later he dived to 20m. Prior to the second dive he had removed an undersuit but did not adjust his buoyancy. During the ascent from the second dive he became positively buoyant and struggled to control his ascent. His buddy held on to him to help slow the ascent but, at 3m, he had to let go of him. The buoyant diver rose quickly to the surface. His computer indicated a fast ascent and went into emergency mode. His dive duration was 40 min. The diver was monitored for signs of DCI but none were experienced.

June 2005 05/162

Two divers conducted a dive to a maximum depth of 22m. Towards the end of the dive they had ascended to 14m. At this point one of the pair became too buoyant. She attempted to dump air from her drysuit but none was released. She was unable to prevent herself being carried to the surface. Her dive duration was 34 min. She was placed on oxygen and the Coastguard was alerted. After recovering her buddy the boat returned to shore and the diver was taken by ambulance to a recompression facility. No signs of DCI were found and the diver was discharged within 2 hours.

June 2005 05/390

Following a rapid ascent from 14m. Solent Coastguard took medical advice, both being taken to QAH for oxygen therapy. (Coastguard report).

June 2005 05/386

Falmouth Coastguard received a call from dive RHIB reporting having a diver aboard who had made a rapid ascent from 19m, the diver was medi-linked with a diving doctor who recommended he be seen at A&E with continuous oxygen to be administered. The casualty was met by land ambulance and transported to hospital. (Coastguard report).

June 2005 05/261

A diver conducted a dive to 36m for 35 min including an 8 min stop at 6m. 24 hours later he dived to 45m. During his ascent from this dive he lost control of his buoyancy and rose to the surface missing about 30 min of decompression stops. He was placed on oxygen and airlifted to a recompression facility. He was given precautionary recompression treatment. No subsequent ill effects were experienced.

June 2005 05/393

Dive charter vessel reported to Falmouth Coastguard having two divers aboard having made a rapid ascent, medical advice was obtained and the vessel advised to return to shore, give 100% oxygen for 1 hour and seek medical advice with GP. (Coastguard report).

June 2005 05/397

Brixham Coastguard received a call from dive support vessel reporting a diver having made a rapid ascent from 8m, the max depth was 25m for 19 min. The parent vessel had divers in the water, another RHIB took the casualty to QAB for transportation to DDRC. (Coastguard report).

June 2005 05/398

Solent Coastguard received a call from dive vessel reporting having two divers aboard who had made a rapid ascent from 30m, both divers missed 9 min of stops. The divers were airlifted from the vessel by Coastguard helicopter R-I and transported to QAH for treatment. (Coastguard report).

July 2005 05/309

Two divers conducted a dive to a maximum depth of 35m. During the ascent one of the pair's SMB became entangled with another and he was dragged to the surface missing 3 min of decompression stops. His buddy was using a rebreather and he experienced buoyancy control problems at 25m and made a buoyant ascent to the surface missing 27 min of stops. The divers were placed on oxygen and the Coastguard was alerted. The divers were airlifted to a recompression facility where they received precautionary recompression treatment.

July 2005 05/298

Two divers descended to a wreck in a maximum depth of 29m. At 20m one of the pair panicked and ascended to the surface in 20 seconds. His buddy descended to the wreck, waited 3 min and then made a normal ascent to the surface. No subsequent ill effects were experienced.

July 2005 05/405

Solent Coastguard received a call from dive vessel reporting having a diver aboard having missed 5 min of stops, medical advice was sought and it was advised the diver be airlifted to recompression chamber for treatment. (Coastguard report).

July 2005 05/157

Four divers were placed on oxygen and airlifted to a recompression facility for treatment after they made a rapid ascent from 37m with a dive duration of 25 min.

July 2005 05/412

Holyhead received a call from a diving RHIB reporting having two divers aboard having made a rapid ascent from 24m missing all stops, both divers were air evacuated to a recompression chamber, Porth Dinllaen prepared the HLS. (Coastguard report).

July 2005 05/175

Two divers planned a dive to a maximum depth of 29m. One of the divers was using a twin set with twin regulators. One of the regulators free flowed when switched on and again in the water. The problem then appeared to be resolved and they descended. The diver who had had the regulator problem experienced excessive air consumption although no escaping air was seen. Towards the end of the dive this diver was on 90 bar and his buddy on 120 bar. 4 min later the diver suddenly ran out of air. He gave an 'out of air' signal and his buddy gave him her main regulator and switched to her pony regulator. There was busy boat traffic and they stopped to deploy a delayed SMB. The diver who was out of air struggled to ascend and stopped his attempts to reel in the SMB line. They then made a rapid ascent to the surface missing a planned 3 min safety stop at 6m. They were recovered into their boat and placed on oxygen. They reported the incident to the Coastguard and on return to shore they sought specialist medical advice by phone. No symptoms of DCI developed and no further action was taken. The diver who had been out of air complained of a sore ear.

July 2005 05/183

Two divers, using nitrox 32, had completed a dive to a maximum depth of 31m and were making their ascent using a delayed SMB. At a depth of around 22m a third diver, who was unknown to them, appeared from below them and swum up past them and ascended their SMB line. This diver was trailing an un-inflated SMB attached to his BCD by a line. The two divers continued up to 6m. One of the pair felt the SMB line being pulled upwards. The third diver then reappeared swimming back down the line. The divers had to pay out line to prevent them being dragged down. The pair signalled to the third diver to re-ascend but when he was 4m below them he released the line and drifted off and down. The pair settled at 6m, sorted out their SMB line and commenced their decompression stop. They then spotted a mass of bubbles and moved over to them, one of the pair descended slightly and found the third diver at around 14m. The other diver of the pair only had 50 bar remaining and stayed at 6m. The diver from the pair saw that the part inflated SMB was still attached to the third diver, she released this and brought him to the surface using a controlled buoyant lift, her buddy joined them and ascended with them. Their dive duration was 38 min including a 4 min stop at 6m. They were recovered into their boat and the third diver was then transferred to his own boat. The third diver had been one of another pair of divers, who were also using nitrox 32, and diving to a depth of 31m. During the ascent, at a depth of 16m, the third diver's buddy began a buoyant ascent. He was unable to dump air from his suit and he rose rapidly to the surface. His computer indicated missed stops. He was placed on oxygen. When the third diver surfaced his computer also indicated missed stops. He too was placed on oxygen and the Coastguard was alerted. The indications were that the third diver had missed 10 min of stops and his buddy had missed 34 min of stops. The third diver had been holding on to the SMB line when his buddy started to ascend. He had been dragged up to 8m before he let go and then he dropped back down to 20m before starting to re-ascend. He had tried to deploy a delayed SMB but started to panic and failed to do so. He was then found by the first pair of divers and assisted to the surface. The divers who had missed stops were taken by ambulance to a recompression facility. Neither displayed any symptoms of DCI but both were given precautionary recompression treatment. It was found that the BCD inflation valve of the diver who had made the buoyant ascent had been slowly leaking causing his BCD, which he did not normally use, to inflate.

July 2005 05/414

Portland Coastguard received a call from dive vessel reporting having a diver aboard who had made a rapid ascent from 7m following a dive to 35m, all stops missed, Coastguard rescue helicopter R-WB airlifted the casualty to Poole where they were met by Poole Coastguard and an ambulance for transportation to the chamber. (Coastguard report).

July 2005 05/416

Dive boat reported to Portland Coastguard having a diver aboard having missed stops following a dive to 20m. A medi-link call was established, the diver was airlifted by Coastguard rescue helicopter R-WB, being met by Poole Coastguard and ambulance for transportation to chamber. (Coastguard report).

July 2005 05/206

A diver conducted a dive to a maximum depth of 18m. During the dive a weight fell out of one of his weight pouches. The diver was unable to prevent an uncontrolled ascent from 6m to the surface. His dive duration was 30 min. The diver had experienced a similar problem with the weight on two other occasions. No subsequent ill effects were reported.

July 2005 05/184

Two divers made a dive to a maximum depth of 17m. One of the pair had difficulty clearing his ears and they took some time to descend the shotline. After 35 min they attempted to deploy a delayed SMB to make their ascent. However the reel jammed and after failed attempts to clear it they abandoned it. At 12m one of the pair lost control of his buoyancy and rose rapidly to the surface, his buddy followed at a faster than normal rate. At the surface the diver who had made the rapid ascent was found to be dazed and with a bleeding nose. He was recovered into the boat and placed on oxygen. The boat returned to shore and the emergency services were alerted. The diver was airlifted to a recompression facility where he received a precautionary recompression treatment.

August 2005 05/230

Two divers conducted a dive to a maximum depth of 30m. At the end of the dive they deployed a delayed SMB and started their ascent. At 25m one of the pair was beginning to rise rapidly. At 20m he turned and swam down to his buddy who grabbed hold of him and checked that his dump valve was open. The buddy made himself negative and held them both at 24m. The buoyant diver was breathing heavily and the SMB line had become tangled in his equipment. Whilst trying to free it the reel spindle broke. The buddy cut the lines and discarded the reel. The pair had sunk back down to 28m. The buddy checked the buoyant diver's contents gauge and it read 25 bar.

The buddy gave the buoyant diver his pony regulator and they made a controlled ascent to the surface. Their dive duration was 34 min. Both divers were safely recovered into their boat and no subsequent ill effects were experienced.

August 2005 05/210

Two divers completed a 35 min dive to a depth of 16m with a 3 min stop at 6m. 3 hours later they conducted a drift dive to a maximum depth of 15m. One of the divers spotted a lobster and swam down to it. He gave the SMB reel to his buddy who found difficulty staying stationary with his buddy due to the current. The first diver was delayed trying to release a bag in which to place the lobster. The buddy was carried away by the current and had to swim very hard to get back. As he got back to the first diver he reached out for him and knocked the regulator from his mouth. The first diver refitted his alternative air source. The buddy gave the other diver the reel and immediately began an ascent, still breathing very hard. At the surface he inflated his suit and BCD and tried to use the SMB for more buoyancy. The other diver surfaced soon afterwards and put more air into his BCD. They were recovered into the boat and the diver who had made the rapid ascent was placed on oxygen. No subsequent ill effects were reported.

August 2005 05/234

Two divers undertook a dive to a maximum depth of 39m. They started to ascend a boulder slope and, at about 25m, one of the pair started to inhale seawater. She tried to keep calm and she swallowed some of the water. She then took her buddy's alternative air source. The pair started to ascend but the troubled diver still felt water in her throat and was still distressed. At about 20m she dropped the alternative air source and made a rapid, free ascent to the surface. She breathed out during the ascent. Her buddy went after her and arrived at the surface shortly afterwards. Their total dive duration was 22 min and they had risen to the surface from 25m in about 40 seconds. They missed a 2 min decompression stop. They were placed on oxygen and the boat returned to shore. They were taken by ambulance to a recompression facility and received precautionary recompression treatment. Neither diver suffered any ill effects.

August 2005 05/436

Dive support vessel reported to Brixham Coastguard that they had a diver aboard who had dived to 31m and upon ascent had made a rapid ascent from 15m. Medical advice was obtained from DDRC Plymouth, the diver had been given oxygen and the diver remained on the vessel with no further treatment required, was advised not to dive again for a period of 48 hours. (Coastguard report).

August 2005 05/437

Dive support vessel contacted Portland Coastguard reporting having three divers aboard who had made a rapid ascent from 10m following a dive to 33m, medical advice was sought which recommended evacuation, Portland Coastguard tasked Coastguard rescue helicopter to airlift the casualties from the vessel to the HLS where an ambulance and Poole Coastguard were waiting to transport the divers to the hyperbaric chamber for treatment. (Coastguard report).

August 2005 05/438

A diver made a rapid ascent from 41m. The dive max depth was 42m, the diver suffered a panic attack and ascended to 36m only to descend to 40m when the rapid ascent occurred, the diver was recovered to the support craft and airlifted to recompression chamber by RAF rescue helicopter R-131 the helicopter was met by an ambulance and Humber Coastguard. (Coastguard report).

August 2005 05/266

A trainee diver conducted a 30 min dive to a depth of 10m. 2 hours later she dived again. With her buddy she made a rapid descent to 22m followed by an increasingly rapid ascent to the surface. They arrived at the surface with computer warnings activated. One of the divers was suffering from sore ears and a slight nose bleed. She was given oxygen and advised to seek medical advise if she experienced subsequent problems.

August 2005 05/439

Dive support vessel reported having picked up a diver from another vessel who had made a rapid ascent from 27.9m, Portland Coastguard tasked Coastguard rescue helicopter R-WB to airlift the casualty from the vessel to shore for onward transportation to recompression chamber, the HLS was prepared by Poole Coastguard, the casualty was transferred to a waiting ambulance. (Coastguard report).

August 2005 05/268

A trainee and an instructor were diving at a maximum depth of 9m. The trainee deployed a delayed SMB. Whilst doing so he lost control of his buoyancy and they made a rapid ascent to the surface. They were placed on oxygen. No subsequent ill effects were reported.

August 2005 05/271

Three divers conducted a drift dive to a maximum depth of 31m. They gradually ascended to a depth of 9m where they deployed a delayed SMB. At this point one of the divers was having problems controlling his buoyancy and he made a buoyant ascent to the surface. His buddies made a normal ascent. The buoyant diver was placed on oxygen for 10 min. No symptoms developed and no further action was taken.

August 2005 05/222

An instructor and two trainees conducted a dive to a maximum depth of 20m. Towards the end of the dive, in a depth of 6m, they stopped to conduct air sharing drills. During the drill one of the trainees took the octopus regulator of the other trainee. He put it in his mouth but was unable to get air from it. The instructor gave him his own octopus regulator but the trainee still had problems. The instructor purged the regulator but this did not solve the problem. The trainee became panicked and rushed to the surface. The instructor went with him and the other trainee followed. Once at the surface the trainee rapidly recovered. It was subsequently found that the first octopus regulator had a guard fitted to it that had not been present in the pre-dive checks and which had prevented the diver from getting air.

August 2005 05/453

Solent Coastguard received a call from dive boat reporting having two divers aboard having made a rapid ascent from 50m, one diver had had a leaking mask upon removing it to clear the water out at the MAX DEPTH! inhaled water, causing the diver to panic. (Coastguard report).

August 2005 05/455

Falmouth Coastguard received a call from dive boat requesting assistance for a diver who had made a rapid ascent from 20m, a medi-link call was established and diver was recommended to return to shore, oxygen was to be given, the vessel returned to shore where it was met by Porthoustock Coastguard, no further medical assistance was given. (Coastguard report).

September 2005 05/457

Diver made a rapid ascent from 29.5m was recovered to the boat where he was administered oxygen, the dive boat contacted Solent Coastguard who organised a medi-link call to the vessel from QAH, the doctor recommended the casualty should be airlifted to recompression chamber for treatment, Coastguard rescue helicopter R-IJ recovered the patient and airlifted to QAH. (Coastguard report).

September 2005 05/465

Diving vessel reported to Portland Coastguard having a diver aboard who had missed stops following a dive to 29m, the casualty was airlifted by Coastguard helicopter to recompression chamber where it was met at the HLS by Poole Coastguard and an ambulance. (Coastguard report).

September 2005 05/248

Two divers conducted a dive to a maximum depth of 37m. After 32 min one of the pair indicated to his buddy that he wanted to ascend as he had 15 min to the surface indicated on his computer and 90 bar remaining. They ascended to the top of the wreck at a depth of 32m during which time they became separated. The diver who had signalled the ascent prepared to deploy his delayed SMB to make his ascent but the reel was jammed. He spent some time trying to resolve this problem and then decided to use his spare reel. By this time his time to the surface was 30 min and he was running low on breathing gas. He made a 1 min stop at 12m, a 8 min stop at 6m and a 6 min stop at 3m. After this he ran out of gas and surfaced with his computer showing that he had missed 10 min of decompression. He was using nitrox 27. He was placed on oxygen for 20 min. His buddy made a normal ascent. No symptoms developed and no further action was taken. The diver believes that he was affected by narcosis.

September 2005 05/277

A diver conducted a dive to 33m for 52 min with 13 min of decompression at 6m. 5 hours later he dived to 16m for 57 min with 3 min at 6m. 17 hours later he dived to 40m. After 20 min he started his ascent up a shotline. At 6m the line was dragged down by other divers on the line. The diver and his buddy left the line and prepared to deploy a delayed SMB. The reel jammed and the divers dumped it to prevent them being dragged upwards. They prepared a second reel but this too jammed and was abandoned. The divers had ascended normally to 6m, then one of them sank back to 23m, ascended to 18m and then sank back to 25m during this period. With no SMB and in a current the diver decided to surface. He ascended to the surface from 25m in about 90 seconds. He was joined by his buddy at 13m on the final ascent. Back on the boat he was placed on oxygen and given fluids. The emergency services were alerted. The diver was taken by ambulance to a recompression facility where he received precautionary recompression treatment. He experienced no symptoms of DCI.

September 2005 05/251

Two divers conducted a dive to 20m. During the ascent, one of the pair became confused and believes that she pressed the air fill rather than the dump valve of her BCD. She made a rapid ascent to the surface. Her buddy ascended normally. The diver who had made the buoyant ascent was given water to drink and monitored for problems. Medical advice was sought. No symptoms developed and no further action was required.

September 2005 05/474

Portland Coastguard received a call from dive vessel reporting having a diver aboard having missed 25 min of stops, rescue helicopter R-WB was tasked to airlift the casualty from the vessel, a medi-link call was established with the recompression chamber, the diver had been to 40m and was ascending when, at 12m, his weightbelt came off and he made a rapid ascent to the surface. (Coastguard report).

September 2005 05/280

Two divers conducted a dive to 32m for 32 min with a 3 min stop at 6m. 1 hour 45 min later they dived to 30m. After about 20 min they started their ascent with their computers indicating 6 min of decompression. They deployed a delayed SMB. Their ascent rate was slowed by a sticking SMB reel and the weight and drag of a bag full of scallops. They conducted a 3 min stop at 6m and ascended to 3m where their computers now indicated that a 13 min stop was necessary. After 3 min one of the pair was low on air and they planned to use the other diver's alternative air source. However due to swell the diver who was low on air lost control of his depth and rose to the surface, his buddy followed him. They had missed 11 min of decompression. They were recovered into the boat, placed on oxygen and the Coastguard was alerted. The divers were airlifted to a recompression facility where they were given precautionary treatment. Neither diver experienced symptoms of DCI.

Technique

October 2004 05/007

An instructor and two trainees were engaged in an alternative air source training session at a depth of 8m. With the two students sharing a regulator they ascended to the surface. Their ascent was slow due to poor finning technique. At the surface one of the students inflated his BCD; he was extremely out of breath. The second student had difficulty orally inflating her BCD and the instructor inflated it with the direct feed. The first student was still out of breath and he removed his regulator and mask. He then began to panic and swim for the shore. During the short swim to the shore the second trainee stated that she was losing a fin. The instructor took the fin. The second trainee then became entangled in the SMB line and the instructor dropped the fin to resolve the tangle. At the shore a fourth diver came to assist. He offered his SMB as a buoyancy aid and gave the student one of his fins to allow her to swim to the exit point. This student then began to feel dizzy and she vomited twice. All divers were safely recovered from the water and no subsequent ill effects were experienced.

November 2004 05/022

Two trainees and an instructor conducted a dive to a maximum depth of 15m. The two trainees' previous experience had been in warm water. Towards the end of the dive they settled on a platform at a depth of 7m to conduct mask clearing drills as previously agreed. The instructor demonstrated and one of the trainees completed the drill. The second trainee then attempted this skill. He kept his eyes closed as he wore contact lenses. When he removed his mask he was shocked by the cold water. He tried to refit the mask but did not feel that it was correctly fitted, so he removed it again. He then inhaled some water and began to breathe heavily. He signalled that he wished to ascend and the instructor brought him to the surface using a controlled buoyant lift. At the surface he quickly recovered and no subsequent ill effects were experienced.

January 2005 05/049

Two divers completed a 34 min dive to a maximum depth of 20m with a 1 min stop at 6m. 1 hour 55 min later they dived again. One diver swam just behind the other and they regularly exchanged signals. 15 min into the dive, at a depth of 19m, the diver who was following removed her main regulator to reposition it. During a subsequent breath her mouth became filled with water and she started to gag. She tried to attract her buddy's attention by nudging his leg but he did not realise that this was a signal for help and swam on. The troubled diver tried to use her octopus regulator but had no air in her lungs and was unable to purge it. She did not think to use the purge button. She made a rapid ascent to the surface and was assisted from the water by others. Her buddy realised that she was missing and swam back looking for her and then made a normal ascent. The troubled diver was placed on oxygen for 10 min. The following day she experienced a tightness in her chest and sought medical attention. Water inspiration was diagnosed and she was advised to see her doctor if an infection developed. The diver had been using a regulator with a side mounted diaphragm and exhaust valve and it was thought that she had not moved her head to this side to enable the initial clearing of this regulator.

February 2005 05/054

Two divers descended a shotline. During the descent they encountered a strong current, abandoned the shotline and descended in open water. The current took them into deep water. During the dive they were joined by a third diver who was using twin 12l cylinders. When one of the original pair reached 100 bar they prepared a delayed SMB to make their ascent. The reel of this buoy jammed and was abandoned. A second reel was prepared but the handle broke. This second failure, combined with the current, led to a stressful ascent and by 15m the diver who had been down to 100 bar was running out of air. This diver used the alternative air source of the third diver. They made a safe ascent to the surface incorporating a 3 min stop at 6m. No subsequent ill effects were experienced.

February 2005 05/060

A trainee conducted a dive to a depth of 7m. Towards the end of the dive he was low on air and surfaced with his buddy. At the surface he had problems due to a lack of buoyancy, he swallowed some water and began to panic. Once out of the water he was placed on oxygen and an ambulance was called. He was seen by a paramedic but no further action was taken. The diver's weightbelt weighed 19.4kg.

April 2005 05/139

A diver was sitting on a pontoon waiting to enter to the water to act as a casualty in a rescue management exercise. He was wearing a twin set with which he was unfamiliar. Without his mask, fins or his suit direct feed fitted he entered the water by falling forward. The edge of the pontoon was thin and he became trapped, face down in the water with the pontoon wedged between his cylinders and his bottom. Without his fins he was unable to kick free. Another trainee quickly pushed him free. Once free, he struggled to keep his face out of the water. An instructor went to his aid and he was helped from the water. No subsequent ill effects were experienced.

April 2005 05/226

Two divers entered the water to make their first sea dive of the year. Both were using equipment some of which was new to them. One diver was insufficiently weighted and she pulled herself rapidly down the shotline. The other diver attempted to keep up with her and became out of breath. He found that he was over-weighted. They dived down the side of a wreck to a depth of 23m. When one of the divers reached 110 bar he signalled to his buddy and they ascended up the wreck. They started to move back towards the shot. But the current was stronger and the diver who had had 110 bar saw that his air was now down to 80 bar. He signalled that they should ascend and he started to move up. However his buddy did not follow and he completed his ascent alone. He was recovered into the boat. His buddy continued to the shotline which she ascended, completing decompression stops on the way.

April 2005 05/225

Two divers entered the water to conduct a drift dive. One of the pair was holding an SMB reel and the other was using a camera. Unknown to them, the diver with the reel started the dive with his pony regulator in his mouth instead of his main regulator. Once underwater they started to swim through some deep gullies but had problems with the SMB line snagging on the rocks above them. The diver carrying the reel had to stop and pull the line free. As he did so he ran out of air. He looked at his contents gauge which read 240 bar. He then realise that he had the wrong regulator in his mouth but he was unable to find his main regulator or his octopus regulator. He looked for his buddy but she was 5m away and busy with her camera. The troubled diver had swallowed a lot of water and was beginning to panic. He

had let go of the SMB reel and was sinking backwards when his regulator swung into view; he grabbed it and put it into his mouth. He was sick and then recovered control. His buddy recovered the SMB reel and handed it to him and they then completed the dive. No subsequent ill effects were experienced.

May 2005 05/357

Solent Coastguard received a call from dive support vessel reporting having a diver overdue by 15 min, the diver subsequently surfaced safe and well before the rescue helicopter and lifeboat arrived. The diver had deployed his delayed SMB (alone) and the reel not being attached drifted off the diver, having over 20 min to go on ascent the diver drifted away from the support vessel. (Coastguard report).

May 2005 05/295

Two divers dived to a depth of 20m. Towards the end of the dive one of the pair was low on air. She attempted to deploy a delayed SMB but failed to do so and lost a large amount of air from her octopus regulator. Her buddy filled the SMB and began the ascent. The diver who was low on air struggled to leave the bottom and had to fin very hard. She added some air to her BCD but had very little air left. At 10m she grabbed her buddy's regulator and began to panic. The buddy switched to his back up regulator and managed to regain control. They made a normal ascent with stops at 6 and 3m. No subsequent ill effects were experienced.

May 2005 05/148

Two pairs of rebreather divers entered the water to descend a shotline to a wreck. The site was very busy, underwater visibility was low, and there were many divers using the same shotline. One of the divers signalled to his buddy and dived. He swam to the shot and started to descend. His signal had not been seen by his buddy and the other divers were unaware of his actions. The lone diver saw other divers on the shot above him and assumed that they were his buddies. He continued down to the wreck at a depth of 36m. At the bottom he waited for the other divers. The others realised that the fourth diver was missing and descended the shotline to find him. At 20m there was no sign of him and they decided to abort the dive. They surfaced and left the water. The lone diver discovered that those following were not his buddies. He then saw others descending and waited for them, only to find that they too were not his buddies. He then discovered that his dive computer was showing a low battery warning. The computer then went blank. He checked his backup computer and this too had failed. With no time or depth information he made a very slow ascent up the shotline. Nearing the surface he spotted a decompression trapeze and moved on to it. He then deployed a delayed SMB. A diver from another group descended to confirm that it was the missing diver and that he was not in trouble. After he had been missing for 20 min the Coastguard was alerted and a lifeboat and a helicopter were tasked to search. The diver eventually surfaced after a dive time of 40 min. He suffered no ill effects. Both computers had suffered battery failure. One had had new batteries that month and the other within 6 months.

June 2005 05/163

Two divers entered the water to descend a shotline. They had readied themselves in a hurry because of a short slack water period. One of the divers had turned her air on but, in the haste to prepare, someone else had turned it off again. At about 10m this diver was unable to get further air. Her buddy was using a recently reconfigured diving set and had not yet fitted an alternative air source. They attempted to share the buddy's main regulator. The diver who had her air turned off was negatively buoyant and they sank down the shotline. The air donor had a hammer clipped to him with a karabiner and this became entangled in the shotline and stopped his descent. The diver without air continued to sink to the seabed at 27m. Her buddy had managed to turn her air cylinder on slightly and she was able to inflate her drysuit. She made a rapid, buoyant ascent to the surface. The buddy was still tangled in the shotline and unable to get to his regulator. Another pair of divers from the same party descended the shotline and found the tangled diver. They gave him an alternative air source, untangled him and all three made a controlled ascent to the surface. The diver who made the rapid ascent arrived at the surface dazed and coughing up blood, she was recovered into the boat and placed on oxygen. The boat returned to the shore and both divers were taken to hospital for checks. No subsequent ill effects were experienced.

June 2005 05/174

Two divers descended a buoyed chain to a wreck. There was a strong current. They exchanged OK signals during the descent. In low visibility they became separated. One of the pair was too buoyant and ascended quickly to the surface. The other diver reached the wreck and realised that his buddy was missing. He looked around and then made his way back to the chain to make his ascent. Both were safely recovered into the boat. No subsequent ill effects were experienced.

July 2005 05/170

Two divers dived to a depth of 22m in a quarry. During their ascent one of the pair ran out of air at about 11m. He switched to his pony regulator and continued his ascent. At the surface he took the regulator from his mouth but was unable to inflate his BCD because his main cylinder was empty. He failed to retrieve his regulator and began to sink. At 5m he dropped his weightbelt and returned to the surface. He shouted for help and another diver entered the water and assisted him back to the shore. He was placed on oxygen and airlifted to a hospital for checks.

August 2005 05/430

Swansea Coastguard received a 999 call from dive boat reporting a missing diver, Swansea Coastguard tasked Horton & Port Eynon lifeboats, RAF rescue helicopter R-169 and Oxwich Coastguard. The units commenced searching when the diver was recovered by lifeboat, the diver had dived from a friend's RHIB with no marker float and no buddy and 5min into the dive his computer failed, continuing with the dive, he lost contact with the boat, when ashore was uncooperative not giving his name or details of club. (Coastguard report).

August 2005 05/211

A pair of divers entered the water and swam to a shotline. They started their descent and, at 4m, one of the divers' regulators stopped feeding him air. His buddy was slightly below him and he headed back to the surface. At the surface he was unable to inflate his BCD and he struggled to stay at the surface. His buddy surfaced and gave him her primary regulator and switched to her own alternative air source. Two other divers from this party had just started their descent, they saw that there was a problem and returned to help. The troubled diver managed to shout that he had no air and one of the others checked his pillar valves. The diver was wearing a twin-set and the valve to his reserve regulator was turned on but the valve to his main regulator was turned off. The other diver turned this valve on and the diver was able to inflate his BCD. The diver was recovered into the boat and the Coastguard was alerted. The diver was airlifted to a hospital for a check up and released later that day

August 2005 05/445

Two divers ran out of air whilst on a 27m dive, the dive boat had no means of communication so the distress situation was relayed to Portland Coastguard by another vessel, Coastguard rescue helicopter R-WB airlifted the divers to Poole HLS where they were met by an ambulance and Poole Coastguard and transported to Poole chamber. (Coastguard report).

Equipment

January 2005 05/047

Two divers conducted a dive to 33m using rebreathers. At 33m one of the pair noticed a bad taste build up and changed to his open circuit bail out system. They aborted the dive and started their ascent. He checked again at 17m but the bad taste remained. The dive was terminated with a duration of 26 min. The diver was placed on oxygen once out of the water. No subsequent ill effects were experienced. It is thought that the cause was cleaning fluid in the gas loop.

January 2005 05/050

A diver was preparing to conduct a dive to 9m using a rebreather. He had conducted pre-checks the previous night and he re-checked the unit prior to use. He put the unit on and walked to the water's edge where he conducted pre-dive buddy checks. During these checks the rebreather exploded and caught fire. The oxygen valve could not be shut and smoke billowed from the unit. Others helped him to remove the rebreather which was then dropped into the water. It was then recovered from the water and oxygen continued to leak from it until the cylinder was depleted. Damage was found to the cylinder valve first stage, the high pressure hose and gauge and the low pressure hose to the manifold. The carbon dioxide scrubber container was burned, the cover catches were blown off and the whole system was covered by a greasy carbon deposit. No injuries were sustained.

February 2005 05/052

A group of divers were engaged in a nitrox training course. A number of the trainees reported that their breathing gas did not taste right. When checked, the gas in these cylinders appeared to contain the odour of some solvent. Four cylinders were affected. The pillar valve was removed from one of these cylinders and it was found that the neck of the cylinder had been painted internally. This cylinder was also found to contain rust. Nitrox 32 had been ordered but cylinders contained a range from nitrox 21 to nitrox 34. No ill effects resulted from these issues.

February 2005 05/101

Two divers were 4 min into a dive at a depth of 18m when the regulator of one of the pair started to free flow. This diver made a rapid ascent to the surface. At the surface she removed her BCD and cylinder and dumped them. She also removed her dry gloves. The gloves were sealed to her drysuit and this opened her drysuit to flooding. She was quickly recovered into a boat and placed on oxygen. Her buddy surfaced 8 min after her. Her diving equipment was later recovered from underwater and it was found difficult to release the weights from the pocket system of the BCD. No subsequent ill effects were reported. This diver had a membrane drysuit and without her BCD and with her suit unsealed by the removal of her gloves she would have been in significant difficulties if the boat had not arrived as quickly as it did.

March 2005 05/064

Two divers conducted a dive to a maximum depth of 35m. 9 min into the dive one of the pair experienced a mild free flow of his regulator. He switched to his octopus regulator which also began to free flow. He took his buddy's octopus regulator but, in doing so, he dislodged his buddy's face mask causing it to flood. The buddy's octopus regulator gave him a mouthful of water so he switched back to his own, free flowing regulator. During this time they had stirred up silt and they lost sight of each other. Both made an ascent to the surface during which the buddy's regulator also started to free flow. Their ascents were faster than normal. Once out of the water both were placed on oxygen. No ill effects were experienced. Subsequent examination showed that one of the regulators had suffered a build up of salt crystals.

March 2005 05/099

A diver was at his maximum depth of 20m when his regulator began to free flow. He made a rapid ascent to the surface. His dive duration was 3 min. He was placed on oxygen. No subsequent ill effects were experienced. The water temperature was 5 deg C.

March 2005 05/286

Two groups of divers entered the water together for a dive. One pair and one group of three. They descended a shotline to a depth of 29m. One of the group was near the bottom when his main regulator began to free flow. The divers ascended together with the diver with the free flow still breathing from this regulator. At 20m his contents gauge was reading 50 bar so he switched to the octopus regulator of one of the other divers. They completed a 1 min safety stop at 3m and then surfaced. No subsequent ill effects were experienced.

March 2005 05/083

An instructor and two trainees conducted a dive to a maximum depth of 18m. They were practicing the deployment of a delayed SMB mid-water. One of the trainees was filling the buoy with his alternative regulator when it began to free flow. The free flow could not be stopped. At this point the trainee had 100 bar in his cylinder. The instructor signalled the ascent. The diver with the free flow and the instructor ascended together and the other trainee ascended a little below them, winding in the SMB line. At 3m the free flow stopped and the trainee gave the 'out of air' signal and started to sink. The instructor gave his alternative air source to the trainee and took hold of him. They sank back down to 13m at which point the instructor used his drysuit buoyancy to bring them to the surface. At the surface the instructor held on to the trainee whilst he orally inflated his BCD. All were safely recovered from the water and no subsequent ill effects were experienced. Their total dive time was 15 min. The water temperature was 5 deg C.

April 2005 05/085

A diver was conducting a demonstration lesson on an instructor training course. He was at a depth of 12m and he used his alternative air source to inflate a delayed SMB. The regulator began to free flow. He ascended with his students and inflated his BCD at the surface. The instructor trainer then turned off the air supply to the regulator. All were safely recovered from the water and no subsequent ill effects were experienced. Their total dive duration was 16 min and the water temperature was 7 deg C.

April 2005 05/116

Two divers conducted a dive to a maximum depth of 22m. At this depth the weightbelt of one of the divers came loose. He struggled to solve the problem and two other divers helped. They made their ascent by following a sloping contour towards

the surface. They made a 2 min stop at 7m before surfacing. Their dive duration was 17 min. The diver who had had problems with his weightbelt was quite shaken by the experience. He was placed on oxygen. No subsequent ill effects were experienced.

May 2005 05/140

Three divers entered the water to conduct compass training. One of the three was using a new regulator that had only been used on one other open water dive. When they entered the water this regulator free flowed. The diver stopped the free flow by turning it down into the water. At 15m he noticed that his octopus regulator was free flowing. One of his buddies offered his alternative air source and the diver took it. Bubbles from the regulator obscured visibility and the other buddy took the free flowing regulator and held it out of the way. The free flow had reduced the diver's air to close to zero. They settled onto the bottom at 20m. The buddy who had provided the alternative air source then commenced a controlled buoyant lift. All three made a controlled ascent to the surface. The diver who was out of air used his BCD emergency cylinder to gain surface buoyancy. All three left the water safely.

May 2005 05/128

An instructor was engaged in a 'Try dive' session in a swimming pool. He was at a depth of 3m with a trainee. The instructor was kneeling on the bottom of the pool when the mouthpiece became detached from his regulator. He reached for his octopus regulator and put this in his mouth. However the mouthpiece became detached from this regulator too. He indicated to the trainee to ascend and the instructor made a free ascent to the surface, breathing out as he did so. Both left the pool safely. The regulator had been recently serviced. No sign of any mouthpiece fastening band was found during a search of the pool bottom. The case was referred to the service agent.

May 2005 05/134

Two divers descended to a depth of 20m in a quarry and started to swim on a compass bearing. One of the pair felt that his regulator was not providing air normally and he checked the manual settings on the second stage. He decided to continue but then, 1 min later, he could hear bubbles and he stopped his buddy. The regulator then began to free flow gently. He checked his contents gauge and found that the pressure had dropped 90 bar in 8 min. The divers started their ascent and as they rose the free flow became violent, filling the water with bubbles and obscuring the divers' vision. They made a slightly faster than normal ascent to the surface. At the surface they were recovered into a boat and brought to the shore. They were placed on oxygen for 2 hours and medical advice sought. No symptoms were experienced by either diver and no further action was taken.

June 2005 05/150

A trainee instructor was engaged in an instructor training course. With his instructor he dived to a maximum depth of 12m. At a depth of 8m he was demonstrating regulator clearing when his regulator began to free flow. The escaping gas made the regulator rise up above the trainee and he had difficulty locating it. The instructor gave the valve back to the trainee who tried to breathe from it. Meanwhile the instructor made ready his pony regulator. The free flow continued and the student struggled to breathe from the regulator. The instructor gave the student his pony regulator and they made a slightly faster than normal ascent to the surface. Their dive duration was 8 min. No subsequent ill effects were experienced.

June 2005 05/154

A pair of divers conducted a wreck dive to a maximum depth of 24m. At the end of the dive one of the divers gripped the wreck with his legs and deployed a delayed SMB. As the buoy rose he tried to use the reel ratchet to control its ascent rate. The ratchet did not work and the buoy accelerated. The line then became jammed on the reel. He then attached his buddy's reel to his jammed reel and used this to complete the SMB deployment. They made a safe ascent to the surface. Subsequent examination of the reel indicated a fault with the ratchet lever spring.

June 2005 05/205

Two divers conducted a wreck dive to a maximum depth of 26m. At the end of the dive, with a 50 bar reserve, they prepared to deploy a delayed SMB. They had to move to another location because of crowding by other divers. During the move, one of the divers' weightbelts became detached and she had to fin back down to the wreck where she held on with her legs. The buddy passed stones to her which she put in her BCD pockets. They deployed the SMB but the reel jammed and it was released. The buoyant diver then ran out of air and switched to her pony cylinder. The buddy gave the diver more weight to carry and they started their ascent. At 13m the diver's pony cylinder ran out and she signalled 'out of air' to her buddy. The buddy gave her his octopus regulator and they completed their ascent to the surface. They called for assistance and were recovered into their boat. The computers did not indicate any missed stops but one showed a fast ascent and was in emergency mode. The divers were monitored but no symptoms of DCI developed.

June 2005 05/165

Two divers entered the water and commenced their descent down a shotline. There was a strong current and they had to pull themselves down the line. They exchanged OK signals as they descended. At the bottom one of the divers discovered that she was out of air and signalled to her buddy. He gave her his octopus regulator and they made a safe ascent up the shotline. It was later determined that the octopus regulator of the diver who was out of air had been free flowing in the current during the descent. The current had carried the bubbles away and neither diver was aware of the problem.

June 2005 05/178

Two divers conducted a dive to a maximum depth of 13m. During this dive one of the pair felt a 'bit odd'. The following day they dived to a maximum depth of 24m. The same diver developed a headache which progressively worsened. He felt that he might pass out and moved to a shallower depth. He indicated to his buddy that he had a serious headache and the buddy indicated that he had the same. On surfacing they discovered that they had the same symptoms; headache, nausea, excessive burping and general weakness. They concluded that their air had been contaminated and they sought medical advice. A visit to the compressor revealed that it was situated in an area close to open tins of hypochlorite acid and other agricultural chemicals. Exposed to these conditions the divers again felt ill. They report subsequent chest and throat problems. The cylinders had been filled on a day when the air temperature was high.

July 2005 05/265

An examiner was diving with an exam candidate to a depth of 22m. The examiner was using a rebreather. About 15 min into the dive he inverted to get a close look at something. When he inhaled he got a mouthful of water. It tasted as if it had come in contact with the carbon dioxide scrubber. When the water hit the back of his throat it caused him to gag. He bailed out onto

an open circuit system containing nitrox 40. He had to force himself to breathe steadily and it took him some time to regain control of his breathing. He coughed sporadically for a few minutes. Once he had settled they continued the dive. Their dive duration was 36 min. Once back on the boat he gargled with fresh water. No subsequent ill effects were experienced.

September 2005 05/254

Three divers were conducting a drift dive at a maximum depth of 18m. 26 min into the dive the low pressure hose of one of the divers' regulators ruptured at the connection point to the second stage regulator. The diver swam to one of his buddies who gave him his main regulator and switched onto his pony regulator. Visibility was reduced around the divers by the bubble cloud and the hose thrashed around in the water hitting one of the divers. The buddy then managed to turn the cylinder off. The two divers made an uncontrolled fast ascent from 15 to 7m. At 7m they managed to reduce their rate of ascent and rose to the surface slightly faster than normal. The third diver went with them. No subsequent ill effects were experienced by any of the divers.

Miscellaneous

October 2004 05/313
Solent Coastguard tasked Littlehampton Coastguard to investigate a report of a person in the water skin diving believed in difficulty. On investigation the skin diver was safe. False alarm with good intent. (Coastguard report).

October 2004 05/318
Dive support vessel contacted Portland Coastguard expressing concern for two divers whose surface marker buoy had disappeared. Divers subsequently surfaced safe and well. (Coastguard report).

November 2004 05/322
Dive support vessel contacted Milford Haven Coastguard reporting an overdue diver, the diver surfaced safe and well, before search and rescue resources were mobilised. False alarm with good intent. (Coastguard report).

December 2004 05/224
A trainee diver did a stride entry into a swimming pool. As soon as he was in the water there was a loud noise and air rushed from the area of his regulator first stage. He was helped from the pool and the equipment was examined. It was found that the part of the valve was loose, causing a sealing ring to blow out and thus allowing the air to escape. This valve and three other similar valves had recently been serviced. The same fault was found on them all. The specification for the torque on this part was 30Nm and all were found to be finger tight.

January 2005 05/329
Brixham Coastguard tasked Torbay Coastguard team to investigate reports of two divers in difficulties. Teignmouth inshore lifeboat proceeded with Coastguard helicopter also tasked, the divers were reported safely ashore. All units stood down. False alarm with good intent. (Coastguard report).

February 2005 05/333
Brixham Coastguard tasked Berry Head Coastguard team to investigate the report of a diver in possible difficulties, the diver made his own way ashore. Confirmed safe and well. (Coastguard report).

February 2005 05/332
Concern was raised for the safety of a RHIB with eight POB, safety investigations were commenced by Holyhead Coastguard tasking Penmon and Cemaes Coastguard teams to investigate. The vessel safely returned to harbour, SAR operations terminated. (Coastguard report).

March 2005 05/340
Aberdeen Coastguard received a call from a member of the public reporting two divers missing in poor visibility. Peterhead Coastguard were tasked to attend, reporting both divers were ashore safe and well. (Coastguard report).

April 2005 05/343
Portland Coastguard was alerted by the shore contact of three divers drift diving, the divers were located safe and well still diving. (Coastguard report).

April 2005 05/292
Two divers descended a shotline. At 36m they left the line and dropped to the seabed at a depth of 42m. One of the divers became breathless and signalled to his buddy that he wanted to ascend. The diver was hyperventilating and starting to panic. The buddy led him back to the shotline and controlled their ascent at a safe rate. At 15m the panicked diver had regained control and they made a safe ascent to the surface including a 5 min safety stop at 5m. It is thought that the distressed diver had suffered from nitrogen narcosis. No subsequent ill effects were experienced.

April 2005 05/293
Two divers descended a shotline to a depth of 39m. One of the pair began to feel breathless and indicated the problem to his buddy. The buddy helped him back to the shotline and they made a safe ascent to the surface. The diver thought that he had been affected by nitrogen narcosis.

April 2005 05/490
Lifeboat assisted in the search for missing diver(s). False alarm. (RNLI report).

April 2005 05/492
Lifeboat assisted in the search for missing diver(s). False alarm. (RNLI report).

April 2005 05/350
Stornoway Coastguard received a call from ambulance control reporting a dive vessel on fire, ambulance, police and fire service on scene. One person trapped in cabin rescued. (Coastguard & RNLI reports).

May 2005 05/130
A pair of divers entered the water from the shore to conduct a navigation exercise. They dived to a maximum depth of 8m. After about 4 min their SMB moved out of the designated area and the dive marshal was about to send another diver in to pull on the SMB line when one of the pair surfaced. He reported that he had become separated from his buddy. The Coastguard was informed and a boat was used to search for the missing diver. The second diver was found, at the surface, 35 min after he was reported missing. He was safely recovered. He reported that he had found himself alone at 8m and then surfaced. A lifeboat and a helicopter were also tasked to assist.

May 2005 05/495
Lifeboat launched to assist dive boat. False alarm. (RNLI report).

May 2005 05/366
Stornoway Coastguard received a call from a M/V reporting a diving RHIB aground, the Lochinver lifeboat was tasked assist, on arrival the vessel was moored and three divers had left the boat to go diving. (Coastguard & RNLI reports).

May 2005 05/496
Lifeboat assisted in the search for missing diver(s). False alarm. (RNLI report).

May 2005 05/498
Lifeboat assisted in the search for missing diver(s). False alarm. (RNLI report).

June 2005 05/499
Two lifeboats assisted in the search for missing diver(s). False alarm. (RNLI report).

June 2005 05/501
Lifeboat assisted in the search for missing diver(s). False alarm. (RNLI report).

June 2005 05/503
Lifeboat launched to assist dive boat. False alarm. (RNLI report).

June 2005 05/384
Portland Coastguard received a 999 call from a diving vessel on a mobile telephone, the report came from the boat skipper reporting a missing diver, the diver had gone on a solo dive for scallops, the boat skipper was very inexperienced. Portland tasked MCA boat Osprey to attend, the MCA boat found the casualty vessel and then the diver. The vessel was towed to shore where they were met by Wyke Coastguard, safety advice was given. (Coastguard report).

June 2005 05/389
Portland Coastguard received many 999 calls reporting a diver off Portland Bill shouting for assistance, Portland Coastguard tasked R-WB to attend the diver. When on scene the diver refused to be recovered, he eventually was picked up by another vessel and returned to Portland, no medical assistance was required. (Coastguard report).

June 2005 05/396
Two divers became exhausted following a shore dive, the divers waved for assistance, Newhaven lifeboat recovered the divers to shore assisted and conned to the divers by the NCI National Coastwatch. (Coastguard & RNLI reports).

June 2005 05/399
Two divers left the dive boat unattended whilst diving, on return to the vessel one was unable to get back aboard, the other got aboard but could not recover the anchor, the other diver drifted away in the tide! Wait there is more! Solent Coastguard were alerted, tasking Coastguard rescue helicopter R-I, Brighton beach patrol and Brighton lifeboat, the divers were recovered to their own vessel. (Coastguard & RNLI reports).

June 2005 05/506
Lifeboat assisted in the search for missing diver(s). False alarm. (RNLI report).

August 2005 05/433
Brixham Coastguard received a call from a fishing vessel following a near miss with shore divers near Slapton Sands, the skipper reported the divers had no surface craft and were not displaying a diving flag although they were using a SMB, the F/V moved further out to sea and further dangers were avoided. Safety advice given. (Coastguard report).

August 2005 05/441
Two divers were shore diving when they were caught in the line of a fisherman, the diver freed himself with the help of the buddy diver, Sunderland lifeboat and Sunderland VLB also attended, the divers were unharmed and continued their dive. (Coastguard report).

August 2005 05/446
Stornoway Coastguard received a call from a fishing vessel reporting an unattended dive RHIB, shortly afterwards the two occupants surfaced unaware of the concern they had caused. False alarm with good intent. (Coastguard report).

August 2005 05/456
Portland Coastguard were alerted by a diving vessel of two divers overdue following a dive to 20m, Swanage lifeboat and inshore lifeboat were tasked together with Swanage Coastguard, before the resources arrived on scene the divers surfaced safe and well. (Coastguard report).

Overseas Incidents

Fatalities

March 2005 05/040

A diver experienced difficulties whilst exploring a wreck. He signalled that he had a problem and his buddy assisted him to the surface. Resuscitation techniques were applied but he failed to recover. It is thought that a heart attack may have been the cause. (Media report).

March 2005 05/094

A potential new trainee participated in a pool training session. This diver had some diving experience over two years earlier and wanted to be re-familiarised with diving skills. He snorkelled a length of the pool and then was seen to be in difficulties at the surface. He was quickly recovered from the pool. He lost consciousness and had no pulse. Resuscitation attempts were started and the emergency services were called. The casualty was taken to hospital but declared dead on arrival. It was later reported that he had suffered a heart attack apparently as a result of a deep vein thrombosis.

April 2005 05/087

A diver failed to surface after a dive to 3m. His body was recovered from the water but resuscitation attempts failed. (Media report).

Decompression Illness

January 2005 05/055

A diver completed a 26 min dive to 30m with a 3 min safety stop at 6m. 27 hours later he dived to 9 m for 40 min with a 3 min safety stop at 6m. 3 hours later he complained of a mild tingling in two fingers of his left hand and a soreness in his upper and lower forearm. This diver had an infected insect bite and this was thought to be the cause. Later that day he was examined by a doctor at a hyperbaric facility and a DCI was diagnosed. He received four sessions of recompression treatment before flying home.

June 2005 05/151

Two divers completed a 48 min dive to a maximum depth of 25m including a 3 min stop at 5m. 1 hour 30 min after the dive, whilst driving home, one of the pair experienced sudden vertigo. He stopped his car. He then developed a tingling in both arms. He contacted the emergency services and was taken by ambulance to hospital. From hospital he was taken to a recompression facility where he received a course of four recompression treatments over the following days. He made an almost full recovery although he had residual occasional dizziness and headaches. He was diagnosed with DCI and a subsequent test revealed a sizeable PFO. The PFO was closed and the diver was able to return to diving.

June 2005 05/161

A dive instructor supervised four controlled buoyant lifts from 12m as part of a training programme followed by a 20 min dive to 12m. The following day he dived to a maximum depth of 24m. After 20 min a delayed SMB was deployed and the divers ascended. At 20m the diver noted a pain in his wrist which increased as he ascended. He conducted a 3 min safety stop at 6m and a further 3 min at 3m. Once out of the water he was placed on oxygen and this eased the pain. Medical advice was sought and he received recompression treatment.

July 2005 05/262

A diver conducted a 46 min dive to 41m with about 15 min spent at less than 8m at the end of the dive. 1 hour 15 min later he dived to 6 m for 7 min. 38 min later he dived to 44m for 43 min with the last 15 min spent slowly surfacing from 8m. About 30 min later he noticed an ache in his upper arms and then in his shoulders and elbows. 2 hours later the condition was unchanged. He breathed oxygen for an hour, which had no effect on the symptoms. He was admitted into hospital and kept on oxygen. The following day the pain had lessened and he was discharged from hospital. The next day he was examined at a recompression facility and treatment was not deemed necessary. The evening of the following day he had a tingling in his right arm and leg, a very slight disturbance in his right eye, and a very slight speech disturbance. He sought further medical advice. He was given precautionary recompression treatment that did not affect his symptoms. It was finally concluded that his second phase of symptoms were unlikely to have been diving related.

August 2005 05/208

A diver completed a 21 min dive to a depth of 20m with a 1 min stop at 6m. 3 hours 39 min later he dived to 17m for 23 min with a 1 min stop at 6m. After this dive he noted a rash on his left thigh and joint pain and stiffness in one of the fingers of his left hand. The diver received recompression treatment which resolved his symptoms.

August 2005 05/233

A diver conducted a 41 min dive to a depth of 40m using air as his main gas and nitrox 66 to decompress. He used a dive computer set for air. 4 hours 33 min later he dived to 37m again using air. After 40 min his buddy surfaced and he continued the dive alone. He surfaced after 77 min having conducted 20 min of decompression stops using nitrox 50. An hour after his last dive he felt a pain in his shoulder but he did not tell anyone. The following morning he had a severe shoulder pain. He was placed on oxygen and medical advice was sought. He was airlifted to a recompression facility where he was treated for DCI. This treatment had little effect on his symptoms.

September 2005 05/223

A diver inhaled water from an apparently defective regulator and made a rapid ascent from 10m. She was placed on oxygen and taken to a recompression facility and treated for DCI. After treatment she still experienced 'pins and needles' on the right hand side of her body.

Illness / Injury

October 2004 05/311

A fully kitted diver tripped over a bollard at the back of a dive boat whilst moving to enter the water. She fell spraining her ankle. She sought medical advice once ashore. She did not take part in any further diving.

October 2004 05/011

A diver conducted a dive to a maximum depth of 30m. At 20m he developed a headache and had a bad taste in his mouth. He took his buddy's alternative air source and they ascended to the surface, completing a 3 min stop at 6m on the way. Their dive duration was 10 min. The diver was placed on oxygen and the party returned to the shore. The diver and his buddy were taken to hospital where they were found to be fit. The air was tested and found to contain oil from the compressor. The compressor 'oil blow off' was found to be faulty. Steps were taken to ensure that no further contaminated air was used.

November 2004 05/018

A pair of divers were diving with others to a depth of 25m along the side of an underwater cliff face. At 18m one of the pair noticed that his buddy appeared to be in difficulties; he was 'wide-eyed' and seemed to be lapsing into unconsciousness. The buddy gave the 'ascend' signal and got a weak 'OK' signal in response. The buddy took hold of the troubled diver and brought him to the surface. At the surface the diver was unable to climb the ladder into the boat and needed assistance. Once in the boat his equipment was removed. He was shaking badly and complained of dizziness and confusion. Other divers from the group returned to the boat and one of these prepared oxygen for the casualty. The diver lost feeling in his right arm and had a numbness in his right leg. The diver was taken ashore in a rescue boat and from there to a recompression facility. No DCI was found and the casualty was discharged. He was advised to re-hydrate and to return to the facility the following day if symptoms persisted. The casualty had a predisposition to vertigo and later explained that the experience of a wall dive and of the open sea around and below him caused him to feel dizzy and apprehensive. The condition worsened and he began to panic.

February 2005 05/057

A diver conducted a 40 min dive to 37m with a 3 min safety stop at 6m. 30 min after the dive, back in the boat, he used a pair of binoculars and immediately became very seasick. He lay down but the symptoms remained for 6 hours. He was then placed on oxygen and medical advice was sought. This diver had suffered seasickness the previous day. It was thought unlikely that the cause was DCI but, due to the remote area in which the divers were operating, it was decided to evacuate him to a recompression facility. The diver was examined by an ears, nose and throat specialist. His condition was not considered to be diving related but he was given a precautionary recompression treatment. The final diagnosis was severe seasickness and vertigo caused by using binoculars on a moving boat following a previous bout of seasickness. Further oxygen therapy was given.

February 2005 05/058

A diver undertook his first open water dive. He had problems with his buoyancy control and continually rose and sank between 5 and 10m. His maximum depth was 13m. During this dive he suffered a ruptured eardrum. The diver was wearing a hood for the first time. The dive was aborted and he was taken to hospital.

March 2005 05/066

Three divers conducted a dive to a maximum depth of 33m, and planned to limit their total dive time to 50 min. At the end of their dive they ascended a shotline and conducted decompression stops at 6m. After 64 min they surfaced and once at the side of the boat it became apparent that one of the three was unwell; he was cold and unresponsive. He was recovered into the boat and placed on oxygen. The party returned to the shore and the diver was taken by ambulance to hospital. He was diagnosed as being hypothermic and slightly dehydrated. He was given a precautionary recompression treatment. He made a full recovery.

March 2005 05/103

After a dive, a diver was transferring his equipment from an RHIB to another, larger, boat in rough conditions. Whilst doing so he slipped and twisted his ankle. The ankle became swollen. He went to hospital where it was determined that the ankle was not broken.

April 2005 05/119

An instructor and a trainee descended a shotline to a depth of 6m to conduct mask clearing and ascent using an alternative air source. The trainee was unable to confidently clear his mask and was slow to respond to signals. The instructor brought the trainee to the surface and the trainee left the water. The trainee later complained of a mild pain in his ear and slight deafness. Subsequent medical examination revealed that he had suffered a rupture to his left eardrum. This eardrum had been previously ruptured in his childhood.

May 2005 05/145

A trainee was in the shallow end of a swimming pool practicing mask clearing drills with an instructor. She had difficulties clearing a fully flooded mask and her instructor helped her to stand up. She removed her mask and mouthpiece and then complained of an intense headache. She was helped from the water and medical advice was sought. She was taken to hospital where she was given pain killing drugs. She was released later the same day.

June 2005 05/152

An instructor and two trainees conducted a 30 min dive to a maximum depth of 15m. 5 hours 30 min later they dived to 13m for 28 min. After this dive one of the trainees noticed a slight discharge from and blood in his left ear. Medical advice was sought the following day and the diver was placed on antibiotics for a severe ear infection.

July 2005 05/179

A diver completed a 45 min dive to a depth of 27m and surfaced normally. At the surface he was unable to fill his BCD since the upper dump valve of the BCD had become detached from the bag. The bag filled with water. He had a 75m surface swim and he struggled to keep afloat. He started to cough and swallowed some seawater. As he approached the boat some blood was seen to come from his mouth. The diver attended hospital for checks and stayed in over-night for observation.

August 2005 05/209

A diver completed a 22 min dive to a depth of 20m. After the dive he sought medical advice since he had pain and impaired hearing in both ears. He reported difficulty clearing his ears during the descent but continued the dive. It was found that both his eardrums were ruptured.

August 2005 05/239

A snorkel diver entered the water by diving head first into the water from the platform of a boat. The impact shattered the glass of his face mask and he received minor cuts to his face. He was assisted from the water and given first aid treatment.

Boating and Surface

March 2005 05/069

Three divers completed a 39 min dive to a maximum depth of 30m. 5 min before surfacing they deployed a delayed SMB. The boat approached too close to the divers, despite warnings from the dive marshal, and the SMB line became tangled around the dive ladder. The diver marshal freed it. The line then became tangled around the propeller; again the dive marshal freed it. The divers completed a 1 min stop at 6m and surfaced without injury.

March 2005 05/310

Three divers were diving from an oil rig platform that had been converted into a dive resort. They entered the water with the dive leader and found that there was a strong current. One of the divers became separated from the others shortly after he entered the water. He surfaced and managed to get back to the platform and leave the water. The other two divers became separated from the dive leader. The dive leader surfaced about 400m down current from the rig and the other two surfaced closer to the rig. The current carried the divers away. There was no boat at the rig and assistance was requested by phone from the shore. Two fishing boats arrived, picked up the divers and returned them to the rig.

July 2005 05/218

The Coastguard was alerted when a diver was overdue from a dive. A helicopter was tasked to search. The Coastguard then used prediction software to estimate the diver's position and tracking and identification systems to identify a vessel in the likely area. The vessel was contacted and asked to keep a look out for the missing diver. Shortly afterwards the vessel reported that they had spotted the missing diver and were recovering him. The diver was then transferred to his own boat. (Coastguard report).

Ascents

October 2004 05/012

A diver dived to a maximum depth of 25m. Towards the end of the dive, at a depth of 6m, he deployed a delayed SMB. Whilst doing so a line attached to the diver tangled in the SMB reel and he was pulled to the surface. His dive duration was 49 min. He was placed on oxygen, other divers were recovered and the party returned to the shore. The diver was taken to hospital but found to be fit. He did not dive for 24 hours and no further action was taken.

March 2005 05/071

Three divers started a descent down a shotline. Two of the three lost contact with the shotline in a slight current and all three resurfaced to regroup. They had descended to 28m for 7 min. After a surface interval of 4 min they re-descended the shotline. They reached a maximum depth of 29m but after 15 min one of the three lost control of his buoyancy and made a rapid ascent to the surface from 20m. He was recovered into the boat and placed on oxygen. All other divers were recalled. The diver who had made the rapid ascent developed a minor headache. The emergency services were alerted by radio and the group returned to shore. The diver was taken to a medical facility and kept on oxygen for 2 hours. No further symptoms developed and no further action was taken.

April 2005 05/086

A pair of divers conducted a dive to a maximum depth of 27m. Towards the end of the dive, at a depth of 20m, they prepared to make their ascent. One of the pair then found that she could not dump air from the cuff dump of her drysuit. She made a rapid ascent to the surface; her buddy made a normal ascent. Her computer did not indicate missed decompression stops. Her dive time was 24 min. She was placed on oxygen. She was later examined in hospital and found to be symptom-free. No problem was found with the dump valve.

Technique

March 2005 05/104

Two divers entered the water to conduct a dive to a maximum depth of 30m. At 15m one of the pair developed a problem with her face mask which kept flooding. Whilst trying to resolve the problem she descended to a depth of 40m. When she discovered this she started to fin upwards and put some air into her BCD. She then lost control of her buoyancy and rose rapidly. She managed to stop the ascent at 6m. She stayed at this depth for 4 min and was rejoined by her buddy. They continued the dive, re-descending to a maximum depth of 20m. 32 min into the dive the diver who had made the rapid ascent started to experience a problem with her ears so they made their ascent, including a 3 min stop at 6m. No subsequent ill effects were reported.

May 2005 05/144

Two divers completed a dive to 35m for 33 min with a 3 min stop at 9m and a 3 min stop at 6m. After the dive one of the divers stated that his dive computer was indicating that a stop at 3m had been missed and had switched into 'SOS' mode. His buddy's computer was clear. Medical advice was sought and the diver was kept under observation for 24 hours. No symptoms developed and no further action was taken.

Equipment

March 2005 05/070

Two divers dived to a maximum depth of 35m. At 32m one of the pair had a problem with air free flowing into his BCD. His buddy took hold of him to prevent him from ascending. They could not stop the free flow so they removed the feed hose from the BCD. They made a normal ascent, with a 1 min safety stop at 6m, and they orally inflated the BCD at the surface. Both were safely recovered from the water.

May 2005 05/124

Two divers dived to a maximum depth of 29m. Towards the end of the dive, at a depth of 7m, the O-ring on one of the pair's cylinders blew. Her buddy turned off the cylinder and the diver used her pony regulator. The O-ring on the pony cylinder then blew and this was also turned off. Another diver offered her octopus regulator. The buddy deployed a delayed SMB and all three ascended safely to the surface.

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.

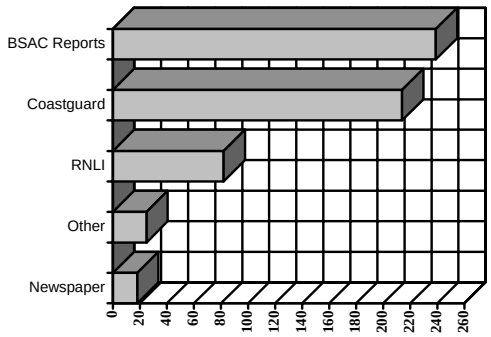
Incident Report Forms can be obtained free of charge by phoning BSAC HQ on ***0151 350 6200***
or from the BSAC Internet website.

Numerical & Statistical Analyses

Statistical Summary of Incidents

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

UK Incident Report Source Analysis



Total Reports: 578
Total Incidents: 441

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

LIST OF ABBREVIATIONS USED IN INCIDENT REPORTS

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
GPS	Global positioning system
Helo	Helicopter
HLS	Helicopter landing site
HMCG	Her Majesty's Coastguard
ILB	Inshore lifeboat
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