The British Sub-Aqua Club

National Diving Committee
Diving Incidents Report
2009

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 2009 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 2009

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

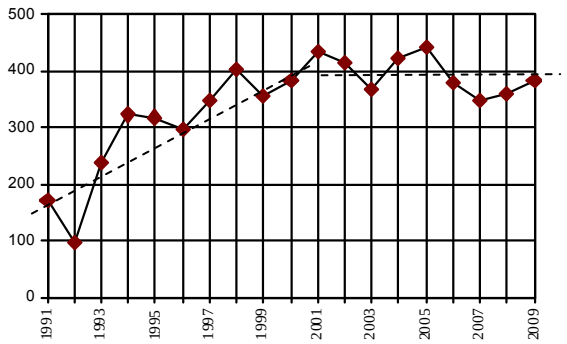
and, in particular, all of those divers and other sources who have taken the trouble to complete Incident Reports and share their learning experience with others.

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

Overview

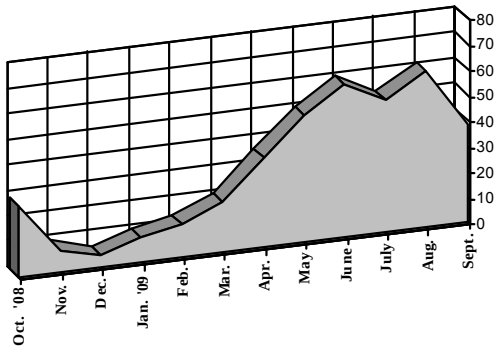
2009 has been a typical year in terms of the total number of incidents reported. 381 UK incidents have been recorded and this is entirely in line with recent years where the average has been around 400. Information is gathered from a number of different sources; divers' incident reporting, the MCA, the RNLI, media sources etc. This year has seen two changes that could have affected the number of reports analysed. Firstly, one of our sources of information has provided less reports than normal (and I think this is less reporting rather than fewer incidents). Secondly, one of the other diving agencies has opened a new source of incident information (for which I thank them). I think it probable that these two actions have resulted in an overall largely neutral effect on the total number of incidents reported.

Number of reported incidents



The distribution of reported incidents by month is shown in the following chart and it follows the normal pattern, with 68% of the dives taking place in the summer months. There is a slight dip in July but this is likely to be due to the timing of holidays, possibly weather and most likely the natural variations that occur with relatively small numbers.

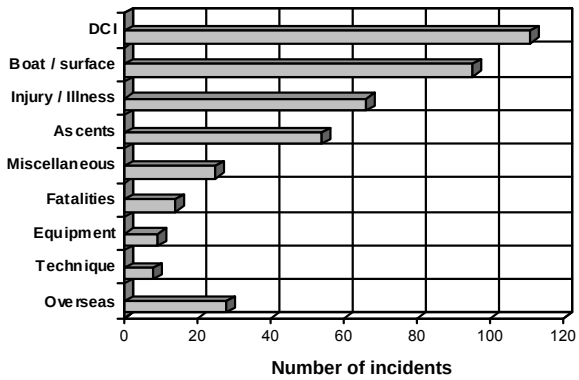
Incidents by month - 2009



Incidents by category

The incident database assigns all incidents into one of nine major categories, and the following chart shows the distribution of the 2009 incidents into those categories.

Categorisation of all the year's incidents



As in all previous years (except 2007) the largest category relates to cases of 'Decompression illness (DCI)'. DCI cases saw a dramatic reduction in 2007 and it was hoped that this marked the beginning of a downward trend. However, 2008 and 2009 have seen a return to the average of recent years and it would seem that around 120 (reported) cases per year is the norm. More detail on these incidents is given later.

The second largest category is 'Boating and Surface' incidents. This category mainly comprises of problems with boat engines (engine failure and out of fuel) and lost diver(s). This category had seen a very strong downward trend over the previous 12 years due to reductions in both types of incident; with the 2008 total being 60% down from the total recorded in 1998. 2009 however has seen this number increase by almost 100% over last year and the numbers have returned to the level experienced around 2002. This increase is almost all due to an increase in the number of reported boating problems coupled with a very minor increase in the number of cases of lost diver(s).

The third category is 'Illness and injury' and the bulk of this is thought to be cases of DCI. But these cases are reported through the RNLI and their reports do not specifically record DCI, they often just state 'Diver illness'. For this reason it is not possible to distinguish cases of DCI from other diver ailments. However, my belief is that as many as 80% of the incidents in this category relate to cases of DCI.

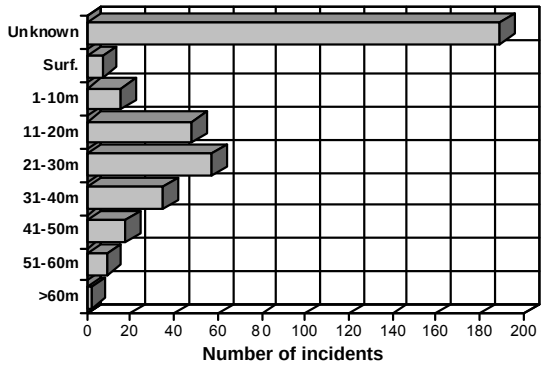
The fourth category is 'Ascents' where divers have made an abnormal ascent but avoided DCI. This is an area that has received a lot of attention over recent years. Between 1997 and 2006 there was a strong trend of increasing incidents in this category. The last three years saw this trend reversed and the 2009 total sees that downward trend continuing; a result, I believe, of the efforts that have been made to improve training in this area. More on 'Ascents' can be found later in this report.

Although small in number 'Fatalities' are the most important category and these are also covered later in some detail.

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

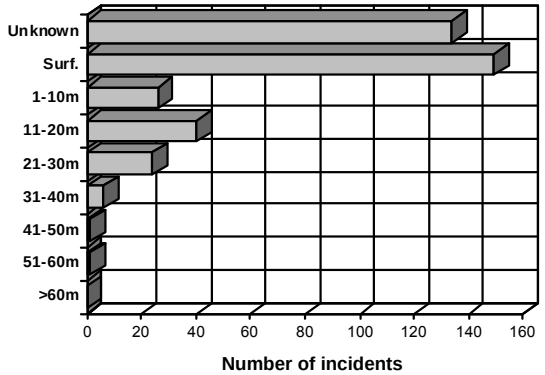


The pattern of depths in the 0m to 50m range is very similar to that normally seen and reflects the amount of diving that takes place in these depth ranges.
The number of incidents reported in the greater than 50m range is 11, which is in line with previous years. One of these incidents was a fatality which occurred during a dive to 52m.

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.
BSAC recommends that helium mixtures are used for depths deeper than 40m and that mixed gas diving should be to a maximum depth of 80m. Mixed gas dives should only be conducted when the diver holds a recognized qualification to conduct such dives.
See the BSAC website for more details of these and other diving depth limit recommendations.

The next chart shows the depths at which incidents started.

Depth at which an incident started

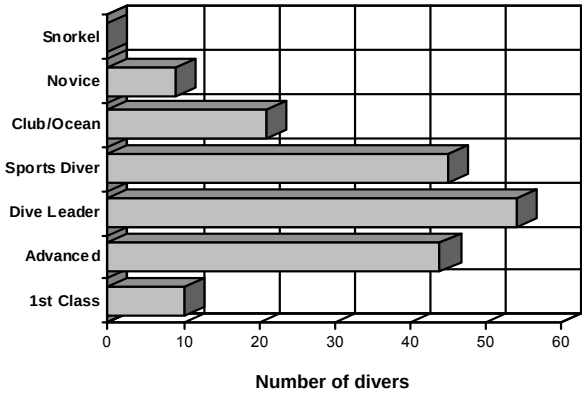


Inevitably the data are biased towards the shallower depths since many incidents happen during the ascent or at the surface. Critical among these are the DCI cases where almost always the casualty is out of the water before any problems are noted. This partially explains the large occurrence of 'Surface'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

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.

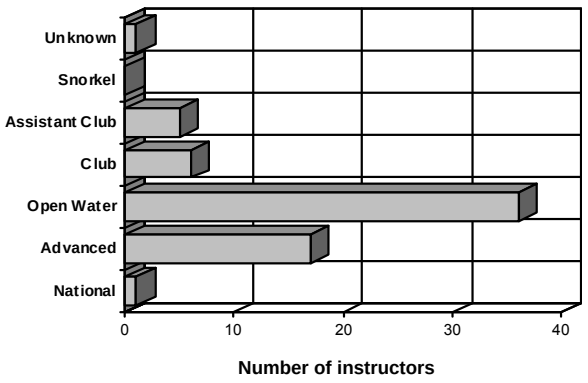
Qualification of the divers involved in incidents



These data are in line with the normal pattern of previous years and probably 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

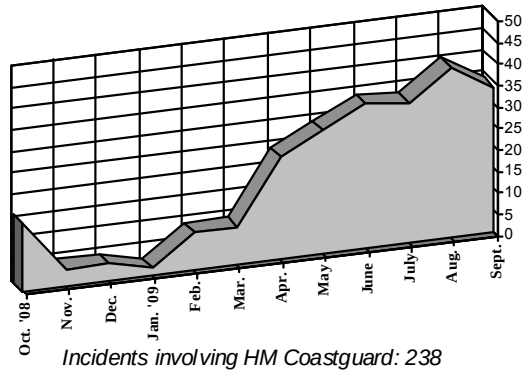


Divers' use of the Emergency Services

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.

238 incidents were reported to us by the Coastguard; this is a little higher than the average of recent years which has typically been around 210.

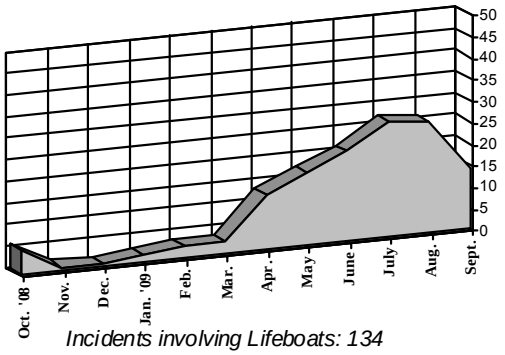
Incidents involving the UK Coastguard Agency - Monthly breakdown



Incidents involving HM Coastguard: 238

There were 134 incidents reported that involved the RNLI and this represents a dramatic increase over previous years. The trend over the previous 11 years had been a progressive reduction from a total of 130 reports in 1998 to less than 100 in 2007; the 2008 total puts us back to where we were in 1998. This increase is largely due to the previously discussed increase in the number of boating incidents and in cases of DCI where the RNLI are often involved in the evacuation of divers to a recompression facility.

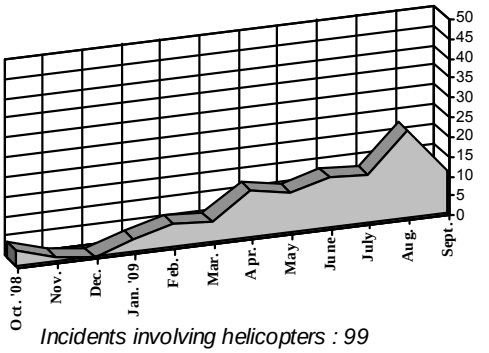
Divers' use of RNLI facilities by month



Incidents involving Lifeboats: 134

In 2009 99 incidents involved the use of helicopters. This number indicates a levelling out of incidents involving helicopter rescue to about 100 per year.
In diving related incidents helicopters are mainly tasked to support searches for missing divers and to transport divers with DCI to recompression facilities.

Divers' use of SAR helicopters by month



Incidents involving helicopters : 99

Fatalities

14 fatal incidents occurred in the UK during the 2009 incident year. This is below the average of 16.1 fatalities per year over the previous ten years. However, comparisons of this nature need to be made with caution since a small change can make a big apparent difference to the result.
Although it is clearly a good thing that this number is below the average of recent years it hides the sad fact that 7 of these people were BSAC members. The ten year average for BSAC fatalities in the UK is 6.0 fatalities per year and thus, from a member's perspective, it has been an unfortunate year.
The factors associated with these fatalities can be summarised as follows:-

- One case involved a diver who is known to have had a heart attack and from the descriptions received it seems probable that some serious medical complication may have been responsible in up to six other cases, but there is currently no hard evidence to prove this.
- Eight cases involved a separation of some kind. Two cases occurred during the ascent from a dive when divers became separated; one of these cases involved the use of an alternative gas source. Two cases involved three divers diving together; in one case a diver had a free flow and left the other two and in the other case one of the three lost contact with his buddies and was found unconscious. Two cases involved divers who lost consciousness underwater leading to their separation from their buddies. One case involved a double fatality where the divers surfaced separately, one unconscious and the other losing consciousness very shortly afterwards.
- Three cases involved three divers diving together (includes the two cases mentioned above).
- One case involved a solo rebreather diver who re-entered the water for a shallow dive.

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

Diver age may have been a factor in this year's fatal incidents. 8 (57%) of this year's fatalities involved divers over the age of 50. This is against a background of 16% of the diving population in this age range (from a BSAC UK site survey). The natural tendency is for health and fitness to decline with increasing age and the above numbers seem to indicate that divers need to pay more attention to these aspects as they grow older.

Decompression incidents

The BSAC database contains 111 reports of 'DCI' incidents in the 2009 incident y ear, some of w hich involved more than one casualty. When these multiple cases are counted the result is 117 cases of DCI.

An analysis of the causal factors associated w ith the 111 incidents reported in 2009 indicates the follow ing major features:-

41 involved diving to deeper than 30m
31 involved rapid ascents
26 involved repeat diving
22 involved missed decompression stops

Some cases involved more than one of these causes.

As stated earlier, some of the 'Injury and Illness' incidents are also thought to be DCI related.

Ascent related incidents

'Ascent' related incidents have fallen dramatically over recent years and some of this decline is likely to be due to the focus that has been placed on this important area of diving skill.

54 cases of 'Ascent' problems have been recorded in 2009 and nearly all of these w ere 'rapid ascents'. An analysis of these 'rapid ascents' (where the detail is known) is as follows:-

33%	Simply poor buoyancy control
15%	Panic / anxiety / rush for surface
10%	Weighting or weight related problems
5%	Out of air / gas
5%	Delayed SMB problems
3%	Regulator free flows
3%	Drysuit control malfunction

It is certain that many other such cases have gone un-reported but it is anticipated that these root causes w ill apply to all uncontrolled ascents.

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 54 cases.

Conclusions

Key conclusions are:-

- The number of incidents reported each y ear in the UK has levelled out to around 400.
- The number of fatalities of BSAC members is one above the average of the previous 10 years.
- The number of fatalities of non-BSAC members is lower than the average of the previous 10 years.
- Diver age and related health and fitness issues may have been a strong causal factor in this y ear's fatalities. The average age of this y ear's fatalities is 51; the average age of the back ground diving population is 38.
- The number of 'Boating' incidents has increased dramatically.
- Cases of 'Ascent' problems continue to fall.

As has been stated many times before, most of the incidents reported w ithin this document could have been avoided had those involved follow ed a few basic principles of safe diving practice. The BSAC publishes a booklet called 'Safe Diving' (latest edition published in January 2009). which summarises all the key elements of safe diving and is available to all, free of charge, from the BSAC website or through BSAC HQ.

Remember y ou can never have too much practice and the further y ou stay aw ay from the limits of y our ow n personal capabilities the more likely y ou 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 experi ences for publication, the least that we can do is to use this information to avoid similar problems.

Finally, if y ou must have an incident please report it using our Incident Report form, available free via the BSAC w ebsite or from BSAC HQ.
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 2008 09/001

Two divers conducted an uneventful dive to a maximum depth of 16m. During their ascent they made a safety stop at 6m. At the surface one of the pair lost consciousness. He was recovered into the boat and resuscitation techniques were applied. The Coastguard was alerted and the casualty was taken by helicopter and ambulance to hospital where he later died. During the helicopter lift the winch failed and the casualty and winchman had to be lowered back down on the end of the winch line. (Coastguard report).

October 2008 09/002

Three divers entered the water and swam in a strong current to reach their shotline. They descended to the wreck, to a maximum depth of 30m, and one of the three moved to join another dive pair as previously planned. The remaining two divers swam deeper towards the rudder of the wreck. One of the pair disturbed silt on the seabed and disappeared in the cloud of silt. The other diver hovered above the cloud looking for his buddy. The cloud rose up to the hovering diver and he rose up to stay in clearer water. He spotted his buddy's bubbles and swam towards her. The buddy then appeared out of the silt cloud and they signalled to each other to ascend. Their ascent was erratic; at times they rose too fast, at other times they sank back down. The diver who had been in the silt cloud declined her buddy's suggestion to conduct a safety stop at 4m and they continued to the surface. Their dive duration was 4 min. At the surface there was a sizeable swell and the buddy started to deploy his delayed SMB. He then heard the diver who had been in the silt cloud groan and then saw her faint. The buddy inflated her BCD to support her at the surface and gave an emergency signal to the boat. The casualty was recovered into the boat and resuscitation techniques were applied. She was taken ashore and further resuscitation was attempted by attending paramedics and a doctor. The diver was transferred to hospital where she was declared dead. The cause of death was given as 'convulsion while diving'.

January 2009 09/022

A diver aborted his first dive due to a free flowing regulator. Later he dived again with another trainee and an instructor. During this dive he experienced a regulator free flow again and left the instructor and the other trainee. The other trainee signalled to the instructor that the first trainee had surfaced with a regulator problem. When the instructor and the other trainee surfaced they found that the diver with the free flow was not to be seen. A search was quickly initiated and the missing diver was found unconscious at a depth of 35m. He was brought to the surface and resuscitation techniques were applied. The emergency services were alerted and the diver was airlifted to hospital where he was declared dead.

April 2009 09/073

Two divers conducted a dive to a maximum depth of 22m for 35 min. They made their ascent up an underwater cliff face and then deployed a delayed SMB to continue their ascent. One of the pair then made a rapid ascent to the surface, signalled distress and then sank back down. An underwater search was conducted and the diver was raised to the surface. Resuscitation techniques were applied and the emergency services alerted. The casualty was transferred to hospital where he was declared dead on arrival.

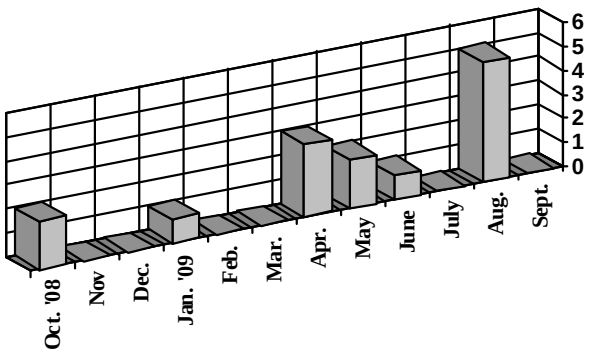
April 2009 09/074

A rebreather diver entered the water from the shore to recover a lost weightbelt. The alarm was raised when the diver was spotted floating on his back, motionless at the surface. A nearby diver went to the casualty and towed him to the shore giving rescue breaths on the way. Once ashore further resuscitation techniques were applied and breathing and a good pulse were soon re-established. A number of Coastguard and RNLI personnel were exercising in the area and they came to help. The casualty was airlifted to hospital but died that night without regaining consciousness.

April 2009 09/077

A pair of divers conducted a wreck dive to an approximate depth of 52m. At this point they signalled to each other that they would turn to make their way back. One of the pair moved off but quickly realised that his buddy was not following him. He went back and found his buddy , he had his regulator out of his mouth and he was not responding. The buddy tried to put the diver's regulator back into his mouth and then he tried his octopus regulator; neither was accepted. The buddy then lifted the casualty to the surface using a controlled buoyant lift; their ascent was quite fast. Once back in the boat resuscitation techniques were applied and the Coastguard was alerted. The casualty was taken by lifeboat and then airlifted to hospital but he failed to recover.

UK Fatalities - Monthly breakdown from October 2008 to September 2009 incl.



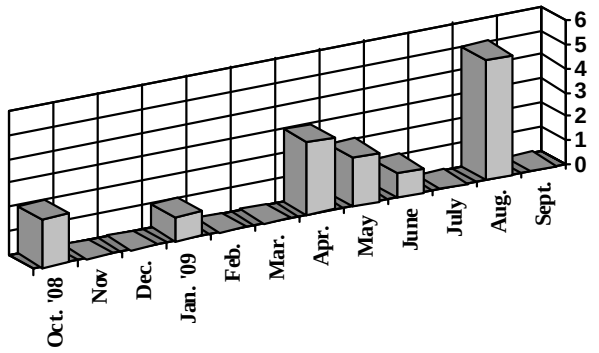
May 2009 09/075

A pair of divers became separated during a wreck dive. One of the pair conducted a search but was not able to locate his buddy so he surfaced. The second diver did not surface. The Coastguard was alerted and an underwater and a surface search involving two helicopters, a fixed wing aircraft, a lifeboat and other vessels was initiated. The missing diver's body was found on the seabed by other divers 15 days later. It was recovered by police divers after a further 2 days. A post mortem analysis indicated that the casualty had suffered a heart attack.

May 2009 09/076

A pair of divers conducted a dive to a maximum depth of 28m. One of the pair deployed his delayed SMB and made an ascent, missing a planned safety stop. When he surfaced the boat was nearby and the other diver w as floating motionless in the water in the same area. The skipper instructed the diver to get the casualty onto the diver lift and he w as recovered into the boat. The buddy also got back onto the boat and commenced resuscitation. As other divers from the party surfaced they assisted with the resuscitation. The Coastguard w as alerted and the boat headed for harbour. The casualty was transferred onto a lifeboat and then airlifted to hospital. Initially the diver showed signs of improvement but died later that evening.

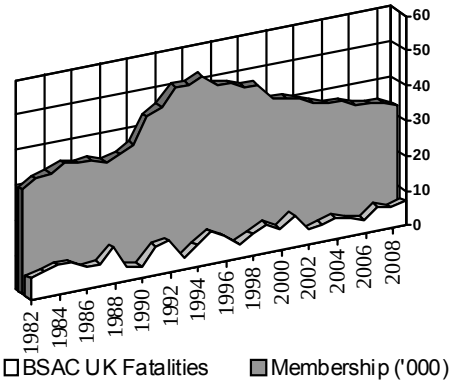
UK Fatalities - Monthly breakdown from October 2008 to September 2009 incl.



June 2009 09/126

Two divers conducted a w reck dive in a maximum depth of 20m. Tow ards the end of the dive one of the pair deployed a delayed SMB to make their ascent. Once he had done this he looked around for his buddy and saw that he had floated up a little and w as swimming back dow n. The diver w ith the SMB then indicated to the buddy to put his hand around the SMB line and they started their ascent. The diver then noticed that the buddy had started to descend so he removed the buddy's finger from the deflate button of his BCD and started to inflate it. At this point he saw that the buddy 's mouthpiece had come out of his mouth and that his eyes were very large. He immediately let go of the SMB and used a controlled buoy ant lift to bring him to the surface. At the surface the alarm w as raised and the boat was quickly alongside the divers. The casualty was recovered into the boat where he was found to be unconscious. The Coastguard w as alerted and resuscitation techniques were applied. The boat w as met by a lifeboat and the casualty and his buddy were transported to hospital. The casualty failed to recover.

BSAC Fatalities against membership 1982-2009 (UK fatalities only)



August 2009 09/194

Two divers entered the w ater to conduct a dive to a depth of 48m. The divers sent the boat's anchor to the surface as expected. Shortly afterw ards one of the divers' delay ed SMB appeared; it w as then pulled below the surface. The boat followed the bubbles. The diver then appeared at the surface, face down with his dry suit fully inflated. He w as recovered into the boat and the tw o people in the boat started resuscitation techniques. The Coastguard w as alerted and a helicopter was tasked to assist. The second diver's delayed SMB then appeared at the surface follow ed by the diver who gave a distress signal. The boat moved to him and passed him an oxygen demand valve. He then lost consciousness and started to drift from the boat. The tw o in the boat pulled him back and recovered him from the w ater. They informed the Coastguard that they had two casualties and started resuscitation techniques on the second casualty . The helicopter arrived and both casualties were winched aboard. They w ere flow n to a hospital where they were declared dead on arrival.

August 2009 09/196

Two divers conducted a dive to a maximum depth of 25m. One of the pair deployed a delayed SMB for their ascent at the end of the dive. They made a safety stop during w hich time one of the pair had to sw itch to his alternative regulator; in doing so he got a mouthful of w ater. He took his buddy 's alternative air source and again got a mouthful of w ater. During this time they sank back to the seabed. At this point the diver w ho had been swapping regulators released his w eightbelt and made a buoyant ascent to the surface. He w as spotted by those in the boat face down and unresponsive. The second diver arrived at the surface shortly afterw ards in a distressed state. The boat crew recovered the first diver and then moved to the second who had by this time lost consciousness. He too was recovered into the boat. The first diver w as revived and resuscitation techniques w ere applied to the second diver. The Coastguard was alerted and the casualties w ere moved onto a lifeboat and then airlifted to hospital. T he first diver w as released from hospital. The second w as placed in intensive care but died the following day.

August 2009 09/195

Three divers entered the w ater to dive to a reported depth of 50m. One of the three surfaced unconscious and with the assistance of a nearby fishing vessel he w as recovered from the w ater. The Coastguard w as alerted and resuscitation techniques w ere applied. A lifeboat and a helicopter were tasked to assist. The casualty w as transferred to the lifeboat where he was pronounced dead by a doctor.

August 2009 09/229

An instructor and tw o trainees w ere conducting a w reck dive with the instructor leading. One of the trainees w as then found to be missing and the instructor and the other trainee searched for him. They found him face dow n on the bottom with no regulator in his mouth. The instructor could not get the regulator back into the casualty 's mouth. She inflated his BCD and sent him to the surface. The casualty w as spotted unconscious at the surface and recovered into a nearby dive boat. Resuscitation techniques were applied and the casualty was brought ashore. Despite efforts to save him he failed to recover. It was suggested that a heart condition may have been responsible.

Decompression Incidents

October 2008 09/059
A diver surfaced from a 43m dive missing stops. The Coastguard w as alerted and the diver w as transferred to a recompression facility for treatment. (Coastguard report).

October 2008 09/007
A diver conducted a dive to a maximum depth of 36m for a duration of 35 min including a 1 min stop at 12m and a 2 min stop at 6m. About 1 hour after this dive he began to feel giddy and disorientated and he was sick. He w as placed on oxy gen and the Coastguard was alerted. He was taken by lifeboat and ambulance to a recompression facility where he was treated for DCI. It was suggested that treatment for an ear infection which began 2 weeks prior to the dive may have been a causal factor.

October 2008 09/010
A pair of divers conducted a w reck dive to a maximum depth of 50m. One of the pair w as using trimix 18/31 w ith nitrox 42 and nitrox 84 for decompression. The other was using air with nitrox 72 for decompression. At 47m the divers attached a lifting bag to an object that they found, this did not lift the object so they used two delayed SMB buoys to send the object to the surface. They ascended to the top of the wreck at a depth of 34m and after a dive duration of 32 min they deployed a delayed SMB to make their ascent. They began their ascent and the air diver indicated that his air supply was low, he switched to his buddy's main supply for several minutes. They made a rapid ascent to 10m. They became tangled in the SMB line. The diver who was low on air attempted to sw itch to his decompression gas but found that the regulator would not work; he switched back to his buddy's gas supply. They lost buoy ancy control and sank back to 23m, still entangled in the line. The buddy took control and they made a rapid ascent to the surface. The buddy immediately descended back to 6m to make his decompression stops and he surfaced after a dive duration of 86 min and developed no symptoms. The diver w ho w as low on air w as recovered into the boat, his dive duration w as 39 min, he w as breathing from his now w orking nitrox 72 cy linder. He was placed on oxygen, given fluids and the Coastguard was alerted. The diver, whose only symptom w as a small nose bleed, w as airlifted to a recompression facility where he was treated.

October 2008 09/011
An instructor conducted a training dive to a maximum depth of 18m for 35 min including a 2 min stop at 6m. 50 min later he conducted a second training dive to a maximum depth of 16m for 25 min w ith a 2 min stop at 6m. The training consisted of the mid-w ater deploy ment of a delay ed SMB and poor buoyancy control on behalf of the trainees resulted in the instructor making a number of ascents and descents during the dive. 30 min after the last dive the instructor became dizzy and he was sick. He w as placed on oxy gen and the emergency services were alerted. He w as taken to hospital and then to a recompression facility for treatment. He is thought to have had a vestibular DCI.

October 2008 09/062
Two divers developed symptoms of DCI after making a rapid ascent from 29m and missing stops. The Coastguard was alerted and medical advice w as sought. The divers were airlifted to a recompression facility. (Coastguard report).

October 2008 09/064
A diver developed symptoms of DCI after a dive to 48m. The Coastguard w as alerted and the diver w as transferred to a recompression facility for treatment. (Coastguard report).

October 2008 09/065
A diver conducted dives to 34m and 38m and then developed symptoms of DCI. The Coastguard w as alerted and the diver was tr ansferred to a r ecompression facility for treatment. (Coastguard report).

October 2008 09/068
A diver who w as suffering from DCI w as transferred from hospital to a recompression facility by ambulance. (Coastguard report).

October 2008 09/069
A diver developed DCI after a day's diving. The Coastguard was alerted and the diver w as transferred to a recompression facility for treatment. (Coastguard report).

October 2008 09/071
Two divers made a rapid asc ent from 19m. They developed symptoms of DCI and the Coastguard w as alerted. The divers were air lifted to a r ecompression facility for tr eatment. (Coastguard report).

November 2008 09/055
The Coastguard was alerted when a diver developed symptoms of DCI following his second dive of the day. He w as airlifted to a r ecompression facility w here he r eceived r ecompression treatment. (Coastguard report).

December 2008 09/056
A diver developed sy mptoms of DCI after a dive to 27m. He was taken by ambulance to a r ecompression facility for treatment. (Coastguard report).

December 2008 09/027
A diver conducted a 24 min dive to a maximum depth of 19m. During his ascent he made a 3 min stop at 6m. He aw oke early the following morning with an uncomfortable feeling in his right arm. He sought medical advice and w ent to his local hospital. He was diagnosed with DCI and transferred to a recompression chamber. He received tw o sessions of recompression treatment. The water temperature was 6 deg C.

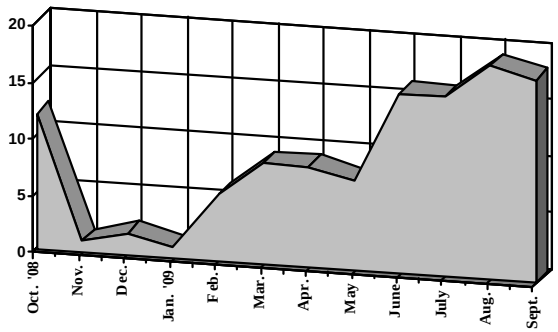
January 2009 09/031
An instructor and tw o trainees entered the w ater to practise the use of an SMB. The divers conducted a surface buoy ancy check and then descended to 6m and conducted a second buoyancy check. They descended an underwater rock face to a depth of 18m. At this depth they practised clipping and unclipping their SMBs. Then the instructor noticed that one of the trainees seemed to be havi ng problems with her buoy ancy control and could not hold a stable position in the w ater. He approached the trainee w ho seemed somewhat unresponsive. He signalled the ascent and brought the troubled diver to the surface using a controlled buoyant lift. Their dive duration w as 7 min. At the surface all divers appeared w ell but they decided to abandon further dives. The second trainee then said that he

wanted to return to the shore as he w as having difficulty breathing. The instructor tow ed him to the shore and he was assisted from the water. This trainee thought that he might have made a faster than normal ascent and he w as placed on oxygen. He complained of a feeling of liquid on his lungs, he coughed up some pink froth and a faint gurgling noise could be heard when he inhaled. The emergenc y services were alerted; a paramedic attended and the casualty was airlifted to hospital. Some lung trauma w as diagnosed and he remained in hospital overnight for observation.

January 2009 09/045

Two divers made a rapid ascent from a dive. The Coastguard was alerted and the divers w ere taken to a recompression facility. One of the pair w as recompressed. (Coastguard report).

Decompression incidents by month



February 2009 09/033

Two divers conducted a dive to a maximum depth of 47m. With decompression stops accumulating the divers started their ascent. One of the pair put air into his dry suit and the valve stuck in the open position. The diver became buoyant and was unable to prevent himself from being carried rapidly to the surface. His dive duration w as 24 min. At the surface he gave an emergency signal and was quickly helped from the w ater. He was placed on oxygen and the Coastguard w as alerted. He was airlifted to a recompression facility but then transferred to hospital for oxy gen treatment and observation. He had shown symptoms of DCI but recompression w as not required. He was discharged the following day.

February 2009 09/048

A diver became unwell with possible sy mptoms of DCI after a dive to 50m. The Coastguard w as alerted and the diver w as airlifted to a recompression facility. (Coastguard report).

February 2009 09/080

Three divers conducted a 15 min dive to a maximum depth of 15m and then returned to a platform at 6m. Here they practised mask clearing and regulator retrieval, then they made three assisted ascents. After the dive one of the group reported that she felt a little unw ell but she recovered in time for a second dive after a 2 hours 49 min surface interval. They dived to 17m for 15 min and then returned to the platform at 6m. They conducted three practice controll ed buoyant lifts from 6m to the surface ending w ith a tow and simulated rescue breaths. During the journey home one of the three noticed a soreness and stiffness in her left arm. About midnight her left arm and shoulder developed a prickling and tightness sensation w ith reduced feeling. She used the internet to seek information on DCI and to identify sources of assistance. The following morning she sought diving m edical advice and then attended a recompression facility. She received a ser ies of four sessions of recompression over a four day period and w as prescribed anti-inflammatory drugs. Her symptoms were fully resolved.

February 2009 09/038

15 min after finishing a dive a diver developed sy mptoms of DCI. The Coastguard was alerted and the diver w as airlifted to a recompression facility for treatment. (Coastguard report).

February 2009 09/049

A diver had sy mptoms of DCI after making a rapid ascent from 6m following a dive to 30m. Medical advice from the duty diving doctor w as to take him to hospital for initial assessment. The boat returned to the marina and the diver w as transferred to an ambulance w ith the assistance of Shoreham Coastguard, and taken to Brighton hospital for assessment. (Coastguard report).

March 2009 09/043

A pair of divers completed a di ve practising survey techniques on an underw ater cliff face. Their maximum depth was 32m and their dive duration w as 58 min including a 1 min stop at 18m, a 2 min stop at 12m, a 9 min stop at 6m and a 3 min stop at 3m. About an hour later one of the pair started to feel sick and dizzy. He was placed on oxygen and diving medical advice was sought. He w as airlifted to a recompression facility and received tw o sessions of recompression therapy. He was diagnosed with a DCI in his inner ear which caused symptoms of vertigo. He w as discharged w ith residual sy mptoms that were predicted to resolve with time.

March 2009 09/072

A diver developed sy mptoms of DCI follow ing a dive to 20m. The Coastguard w as alerted and the diver was transferred to a recompression facility for treatment. (Coastguard report).

March 2009 09/037

Two divers dived to a maximum depth of 33m. At 30m they deployed a delay ed SMB and this resulted in the octopus regulator of one of the divers going into free flow. The diver attempted to stop the free flow but his air supply rapidly diminished from 80 bar to 50 bar. The buddy passed him his octopus regulator and turned off the diver's cylinder. Bubbles in the w ater inhibited the divers ' vision and they made a rapid ascent to the surface. They ascended to the surface from 30m in 50 seconds; their dive duration was 18 min. The divers w ere monitored for sy mptoms of DCI but none w ere found that day. Over the next few days one of the pair experienced dizzy spells and sought diving medical advice. He attended a recompression facility and a bubble in his ear w as diagnosed. He received two sessions of recompression therapy and his symptoms resolved.

March 2009 09/081

A diver suffering from DCI w as airlifted to a recompression chamber. (Coastguard report).

March 2009 09/450

The casualty completed three dives in a day, seemingly without incident. His maximum depth w as 32m. The next day he complained of pains in his shoulder and thumb. He w ent to hospital for a check up w here he w as given recompression treatment.

March 2009 09/173

Two divers conducted a dive to a maximum depth of 19m. After 25 min they w ere at a depth of 14m and making their return swim. One of the pair started to experience buoyancy problems and struggled to stay dow n. At around 9m visibility w as very poor and the dive leader took a compass reading to maintain their course. During this time the buoyant diver's feet came out of her dry suit boots and she w as unable to prevent herself making an inverted buoy ant ascent to the surface. Her buddy, on realising that she w as not there, searched around for her before making his ascent. Other members of the party on the shore saw the buoy ant diver arrive at the surface and one swam out to assist her back to the shore. The Coastguard w as alerted and the diver w as airlifted to a recompression facility . She was not found to be suffering from DCI and was transferred to hospital for overnight observation. She w as released the following day and the hospital staff stated that they thought that she had had a mild DCI.

March 2009 09/092

A 26 year old diver w as flown to the recompression chamber at Millport by RN rescue helicopter R177. The female diver was showing symptoms of DCI hav ing made an uncontrolled ascent from 20m. (Coastguard report).

March 2009 09/279

A pair of divers conducted a dri ft dive to a maximum depth of 27m. After 23 min they decided to make their ascent. One of the pair held a delay ed SMB w hile the other put air into it with his octopus regulator. The regulator got caught on a strap of the buoy when it w as released and the diver w as dragged upwards. He managed to free the regulator at a depth of about 7m but his buoy ancy carried him to the surface. He had over 100 bar remaining and he decided to re-descend the line. He found his buddy at 12m and indicated that he wanted to go back to the seabed. They returned to a depth of 20m and, 30 min into the dive, they started their ascent. They stopped at 13m for 1 min and at 5m for an indicated 5 min. The swell was causing their depth to vary betw een 3 and 7m. The divers' decompression requirement expired after a total dive duration of 38 min and they stayed for a further 2 min, surfacing w ith a total duration of 41 min. The follow ing night, over 24 hours later, the diver who had been pulled up by the buoy noticed a tingling and numbness spreading from his extremit ies to all of his limbs. He sought diving medical advice and attended his local hospital. He w as placed on oxy gen and taken by ambulance to a recompression chamber w here he received four sessions of treatment.

March 2009 09/280

Three divers conducted a dive to 27m and then followed a profile of slow ly declining depth back to 5m where they spent about 12 min. They then spent 1 min at 3m and surfaced slowly. After the dive one of the three felt dizzy and nauseous. He had a meal and something to drink. He rested for 1 hour but the sy mptoms remained so he declined a second dive. He developed bad chest pains. Later that evening he began to feel nauseous again and he had a tingly sensation in his hand and elbow and pain in his elbow . He sought diving medical advice and attended a recompression facility where he received treatment which alleviated his symptoms.

April 2009 09/095

Humber Coastguard arranged evacuation for a diver who had missed stops from 22m. The vessel took their ow n medical advice from the duty navy doctor w ho initially recommended evacuation to the nearest A&E as a precaution. How ever, the diver's condition deteriorated and he had to be evacuated by rescue helicopter 131 to the hy perbaric unit at Aberdeen Roy al Infirmary for treatment for DCI. Seahouses Coastguard met the helicopter at the hospital to assist w ith the transfer. The dive boat failed to follow proper procedures w hen they contacted the duty diving doctor directly and by not informing the Coastguard immediately. By contacting t he Coastguard immediately they can consult medical authorities and prevent any delays by arranging immediate and sw ift evacuation for treatment. (Coastguard & RNLI reports).

April 2009 09/442

The Coastguard w as alerted after a diver made a rapid ascent from 29m. Diving medical advice w as sought and a lifeboat was launched to provide oxygen. The diver w as brought ashore and w as then taken by ambulance and helicopter to a recompression chamber for treatment of DCI. (Coastguard report).

April 2009 09/129

A diver conducted a 47 min dive to a maximum depth of 25m. 4 hours later he dived to 16m for 50 min. The following day, 18 hours later, he dived to 32m for 38 min with a 4 min stop at 5m. Once back in the boat he stumbled w hile w alking across the deck to de-kit. Soon afterwards he sat down and noticed a pain in his back and numbness and tingling in both his legs. He was placed on oxy gen, diving medi cal advice w as sought and the boat headed back to harbour. He was taken to hospital where a neurological DCI w as diagnosed and he w as recompressed. The diver had had a back injury as a child w hich occasionally caused him periods of pai n and he had been diagnosed w ith a PFO following a DCI incident tw o and a half y ears earlier; this PFO had been closed at the time of the first incident.

April 2009 09/103

A diver conducted a 5 min dive to a depth of 6m playing the part of the casualty in a controlled buoy ant lift exercise. 2 hours later he dived w ith an instructor and another diver to conduct a search for a lost w eightbelt. They deployed a shot in 16m and found the weightbelt after 5 min. The diver w as then assessed on his ability to recover the shot and then to deploy a delay ed SMB, mid-water, at a depth of 10m. His first attempt failed but during his second attempt he held on to the delayed SMB too long and started to rise w ith it. When he realised that he was making a rapid ascent he let go of the buoy but he was only 1m from the surface when he halted his ascent. He then ascended to the surface with a dive duration of 25 min. The other tw o divers w ere unable to prevent his rapid ascent; they ascended normally. He was monitored for sy mptoms for the rest of the day but none were detected. Overnight the diver developed 'pins and needles' in his hands and these continued into the morning after the dive. Divi ng medical advice w as sought and monitoring was continued. Later that day the 'pins and needles' got worse and the diver w as airlifted to a recompression facility for two sessions of treatment.

April 2009 09/314

Three divers conducted a dive to a maximum depth of 16m. They were unable to locate the w reck they intended to dive on and they surfaced after 15 min. Some time later one of the divers was involved in carry ing equipment up and dow n a long slipway. He started to develop a headache whilst smoking a cigarette. He was advised to stop smoking and to sit dow n. He

then started to suffer from dizziness and blurred vision and he was placed on oxy gen. An ambulance w as called and he w as taken to hospital. Neurological DCI w as diagnosed and the diver was taken to a r ecompression facility for treatment which fully resolved his symptoms.

April 2009 09/100

The Coastguard w as alerted after a diver developed symptoms of DCI follow ing a rapid ascent from a dive to 28m. His dive duration was 33 min. The diver was airlifted to a recompression facility for treatment. The diver's integral weighting system was knocked during the dive allow ing w eights to fall free, thus causing a buoyant ascent. (Coastguard report).

April 2009 09/101

A 51 y ear old diver w as airlifted from a dive boat to the Aberdeen Royal Infirmary by RN rescue helicopter R137. The diver was suffering from DCI follow ing a dive to 48m. (Coastguard & RNLI reports).

April 2009 09/106

A diver who had conducted a dive to 48m developed symptoms of DCI. He w as airlifted to a recompression chamber for treatment. (Media report).

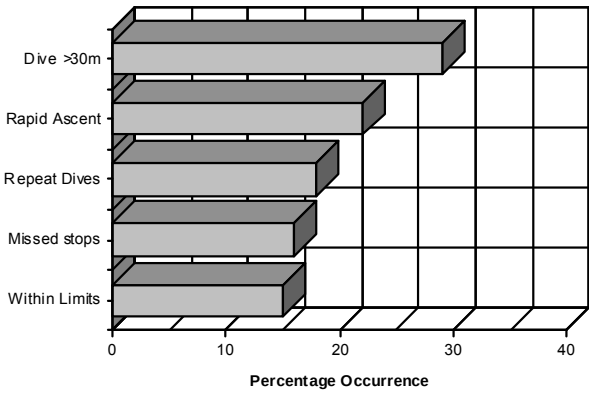
April 2009 09/109

A diver w as admitted to the recompression chamber in the evening. He had developed DCI following a day's diving. (Coastguard report).

April 2009 09/130

A rebreather diver completed a series of nine dives the last of which was to 37m for 62 min including a 3 min stop at 9m, a 3 min stop at 6m and a 10 min stop at 3m. 75 min after surfacing from this dive he developed a skin rash and an itching on the left side of his chest. This rash developed a blue fringe, the diver was placed on oxy gen and the Coastguard w as alerted. The boat returned to harbour and the diver w as taken to a recompression facility. DCI w as diagnosed and the diver was recompressed; this resolved his symptoms.

Percentage analysis of factors involved in cases of DCI



May 2009 09/122

A diver surfaced after a 24 min dive to 52m with his computer indicating that he had missed stops. He developed 'pins and needles' in his legs and the Coast guard was alerted. The diver was air lifted to a r ecompression facility for treatment. (Media report).

May 2009 09/118

A diver conducted a 36 min dive to a maximum depth of 31m with a 3 min stop at 6m. Shortly afterwards she complained of a pain in her low er back. She then began to feel unw ell and nauseous. Once ashore she w as unable to w alk w ithout support and she felt dizzy and her legs w ere numb. She w as placed on oxygen and given w ater to drink. Diving medical advice w as sought and the diver w as transported to a recompression facility. She w as given a ser ies of recompression treatments over subsequent day s and her symptoms improved but, at the time of reporting, her balance remained disturbed. A vestibular DCI w as diagnosed. The casualty had given birth 10 months previously.

May 2009 09/114

Holyhead Coastguard received a request from a boat to evacuate a diver with 'pins & needles' and numbness in one leg following missed stops on a dive to 54m; the buddy completed all their stops. Rescue helicopter R-122 w as tasked to airlift the diver to a hy perbaric chamber in Thingw all for treatment. Hoylake Coastguard met the helicopter at the HLS and assisted with transfer into an ambulance to go to the hyperbaric chamber. (Coastguard report).

May 2009 09/116

Falmouth Coastguard received a call from a dive boat reporting a diver onboard with a strong pain in his elbow following a dive to 80m. He w as initially reported as slowly recovering, however, it w as subsequently necessary to airlift him to DDRC Plymouth for treatment. Lizard AWLB, w ith a doctor onboard, proceeded to initially assess and transfer the diver from the dive boat prior to him being airlifted by rescue helicopter R-193 to the hyperbaric chamber. (Coastguard & RNLI reports).

May 2009 09/120

A trimix rebreather diver undertook a dive to a maximum depth of 58m. After a dive time of 25 min she started her ascent. Her ascent progressed normally , including the necessary stops, until she reached a depth of 12m. At this depth her BCD fully inflated and carried her to the surface, missing stops. It is thought that the inflation valve w as knocked or stuck open; she did not inflate it herself. She w as placed on oxygen and the Coastguard was alerted. She was airlifted to a recompression facility. At the chamber her condition initially deteriorated but she recovered well after treatment. (Coastguard report).

May 2009 09/141

Shetland Coastguard received a call from a dive boat reporting that they had a diver onboard w ho had suffered a blackout at depth and had a headache, but initially had no other symptoms. Medical advice was taken from Balfour hospital and the boat was advised to return immediately to port w here they were met by an ambulance and a dive doctor, by which time the condition of the diver was starting to deteriorate. The diver w as taken to Stromness surgery for assessment and later transferred to the hyperbaric chamber for treatment. (Coastguard report).

May 2009 09/135

Two divers conducted a 27 min dive to a depth of 30m including a 3 min safety stop at 6m. Later that evening one of the pair

discovered that a small area of the skin on her arm w as red, bumpy and itchy. This diver had dived using nitrox 26. She breathed oxygen for 10 min and the sy mptoms resolved. She sought diving medical advice and was told to refrain from diving for seven days.

May 2009 09/199

Two divers conducted a 44 min dive to a depth of 44m w ith a 2 min stop at 23m, a 2 min stop at 15m and a 4 min stop at 6m. Shortly after re-entering the boat, one of the pair noticed a pain in her upper abdomen; this w as thought to be due to her kit pressing on her. A little later she developed an itching sensation in the area and signs of a skin DCI w ere found. Diving medical advice w as sought and although she had no neurological symptoms she was recompressed. She had had a PFO closed nine y ears earlier and a subsequent examination indicated that the closure was still in place.

June 2009 09/152

Three divers conducted a 38 min dive to a maximum depth of 30m w ith a 4 min stop at 6m. Later that day one of the three noticed a dull ache in his left w rist. Over the next tw o hours the pain got worse and spread to become a deep pain in the joint and across the back of his hand. The follow ing morning the wrist was very painful and he sought diving medical advice. He was recompressed and the pain resolved w ithin 5 min of reaching 18m. He received tw o further sessions of recompression treatment.

June 2009 09/183

A diver w ho had made a rapid ascent from 40m and was complaining of chest pains w as transferred to the recompression facility in Stromness by the Longhope lifeboat. (Coastguard & RNLI reports).

June 2009 09/200

A trainee and an instructor conducted a wreck dive to a maximum depth of 22m. The trainee felt seasick prior to the dive and was sick while kitting up. After 26 min the dive leader deployed a delayed SMB and they started to make their ascent. During the ascent they lost control of their buoy ancy and rose quickly to the surface missing a planned safety stop. Their dive duration w as 29 min. Once back in the boat the trainee was sick again. During the return journey the trainee remained unwell and developed 'pins and needles' although not all of the dive party was aware of this. Once back in the harbour it became clear that the trainee w as quite unw ell; the emergency services were alerted and she was placed on oxygen. She was transferred to a recompression facility and received five sessions of recompression treatment over a three day period.

June 2009 09/156

A pair of rebreather divers conducted a 109 min dive to a maximum depth of 67m. One of the pair awoke early the following morning w ith numb and tingling fingers that quickly turned into a pain. The pain spread to his w rist and elbow. He placed himself on oxy gen and this helped. He contacted a recompression facility and w as advised to attend immediately . He received a series of four recompression treatments and w as left with a slight tingling in the tips of two fingers.

June 2009 09/176

Two divers conducted a drift dive in a maximum depth of 18m. During the dive one of the pair suffered from buoy ancy control problems with air migrating into the boots of his drysuit. On one occasion he made a buoyant ascent up to 8m before the dive leader could reach him and assist him back to the seabed in a depth of 15m. They then made a normal ascent w ith a 4 min safety stop at 6m. Their dive duration w as 35 min. Later that day the diver who had had the buoy ancy problems developed a headache. The following morning the headache was worse and he had aches in his muscles and joints. He contacted a recompression facility and he w as advised to go to see them. He w as given a session of recompression treatment which resolved his sy mptoms. It w as suggested that he may have a PFO and he was seeking further medical advice.

June 2009 09/202

A diver conducted a 35 min dive to a maximum depth of 35m with a 6 min stop at 6m. About 10 min after surfacing the diver was bending down when he felt giddy , he then collapsed w ith violent giddiness and retching. The Coastguard w as alerted, the diver w as placed on oxy gen and then airlifted to a recompression chamber. A vestibular DCI w as diagnosed and he received a series of five recompression treatments over the following four day s. It w as a further three weeks before he felt fully recovered. It is thought that stress, rushing to prepare, heatstroke and dehydration were contributory aspects.

June 2009 09/184

An ambulance attended a diver who was thought to be suffering from sy mptoms of DCI follow ing a rapid ascent from 16m. Arrangements were made to transfer the diver by air ambulance to Aberdeen but this w as cancelled w hen the diver refused assistance. (Coastguard report).

June 2009 09/158

A diver conducted one dive and then 2 hours later she dived to 25m for a drift dive. At a depth of 23m she lost contact w ith her buddy and started to panic. She tried to ascend slow ly but at 14m she inflated her BCD instead of dumping air. She made a rapid ascent to the surface. She developed a tingling in her left hand and a pain in her left shoulder. The Coastguard was alerted and the diver was airlifted to a recompression facility for treatment which resolved her symptoms. (Coastguard report).

June 2009 09/204

A diver conducted a 37 min dive to 34m, then, about 4 hours 30 min later she dived to 32m for 40 min. The follow ing day she dived to 44m for 40 min. 1 hour 15 min later she felt an itching across her shoulders and a rash w as found. She w as placed on oxy gen, given w ater and divi ng medical advice was sought. She w as kept under observation, the rash subsided and no further action was required.

June 2009 09/179

A diver under training conducted a 24 min dive to a maximum depth of 9m then, after a surface interval of 15 min, a 15 min dive to a maximum depth of 10m. During these two dives he practised rescue skills including controlled buoy ant lifts, tow ing and the use of an alternative air source. Later that day he noticed a numbness and visual dist urbances. He sought diving medical advice and received recompression treatment that fully resolved his symptoms.

June 2009 09/164

Brixham Coastguard received a ca ll from a shore dive site reporting a diver w ith suspected DCI. The diver began to feel ill when walking up the beach, 30 min after coming back from his dive. Mevagissey CRT attended to assist the air ambulance with evacuating the diver to the hy perbaric chamber at DDRC Plymouth for assessment. (Coastguard report).

June 2009 09/165

Solent Coastguard received a call from a dive boat heading back to harbour w ith a diver onboard who was dizzy and had chest pains follow ing a rapid asc ent from 12m. The dive boat was put in a medical connect call w ith a dive doctor and the advice was for the diver and her buddy to be taken to hospital. The boat was met by Littlehampton CRT and an ambulance and the diver and her buddy were transferred to A&E at St Richard's hospital for treatment. (Coastguard report).

June 2009 09/313

A diver conducted a 55 min dive to a maximum depth of 15m with a 3 min stop at 3m. The following morning he awoke with a dull ache in all his joints, unusual tiredness, nausea, a slight numbness in his left hand and a faint tingle in two of his fingers. During the day he felt dizzy after any phy sical effort. That evening he sought diving m edical advice and attended a recompression facility . He r eceived r ecompression ther apy which resolved his symptoms.

June 2009 09/171

RAF rescue helicopter R122 transferred a 29 y ear old diver from Dorothea Quarry to the recompression chamber at Murrayfield hospital. The diver was suffering from symptoms of DCI following a 55m dive. He had made a normal ascent and completed all his decompression stops. (Coastguard report).

June 2009 09/172

A trainee diver descended w ith two instructors to practise mask and mouthpiece clearing drills at a depth of 5m. While conducting mask clearing he panicked and made a rapid ascent to the surface. He was checked at the surface and felt happy to continue. They re-descended to 5m to continue the drill but he panicked again and made a second rapid ascent to the surface. At the surface he complained of chest and head pains. He was brought ashore, given oxy gen and a call w as made for an ambulance. The Coastguard w as alerted and the casualty was taken by ambulance and helicopter to a recompression facility where he was treated for an arterial gas embolism as a result of surfacing w hilst holding his breath. He responded w ell to treatment. (Coastguard report).

June 2009 09/207

A diver suffering from DCI w as transferred from Largs to the recompression chamber by Largs inshore lifeboat. (Coastguard report).

July 2009 09/191

A diver conducted a 44 min dive to a maximum depth of 21m with a 3 min stop at 6m. 2 hours later she dived to 30m. During the dive she experienced problems with air in the boots of her drysuit. During the ascent she w as in a horizontal posture and again had problems w ith buoy ancy. At a depth of 15m she began a buoyant ascent, her buddy attempted to grab hold of her but was unable to and she w as carried to the surface. Her dive duration w as 35 min. Her buddy surfaced shortly afterwards and they were recovered into the boat. The buoyant diver was placed on oxy gen and the Coastguard w as alerted. The diver felt shocked and very cold and she w as moved into a cabin and w rapped w ith clothing. Diving medical advice was sought and the boat returned to harbour. The diver developed a pain in her right shoulder joint. The diver and her buddy were taken by ambulance and helicopter to a recompression facility where both divers received tw o sessions of recompression treatment.

July 2009 09/211

Solent Coastguard received a call from a dive boat reporting that they had a diver onboard w ith mild sy mptoms of DCI following a dive to 50m for 66 min. A connect call w ith a dive doctor recommended that the diver be evacuated to Whipps Cross hospital for treatment in the hyperbaric chamber. Rescue helicopter CG-104 airlifted the diver to the HLS and he was transferred to hospital by ambulance for treatment. (Coastguard report).

July 2009 09/210

Solent Coastguard received a call from a dive boat w ith a diver onboard who w as suffering from signs and sy mptoms of DCI. Newhaven AWLB w as tasked to provide additional oxy gen and standby until arrival of the rescue helicopter. It was not possible to transfer the diver to Whipps Cross hospital London, so he w as taken by rescue helicopter CG-104 to Poole hyperbaric chamber. (Coastguard & RNLI reports).

July 2009 09/231

A diver conducted a 56 min dive to a maximum depth of 40m including 32 min of decompression stops. 3 hours after the dive he noticed a pain in his left shoulder but put it down to muscle strain. The follow ing morning he discussed this with others and was advised to seek medical opinion. He attended a recompression facility and received tw o sessions of recompression therapy for DCI.

July 2009 09/212

Two divers w ere admitted to the recompression chamber at Douglas. They were showing symptoms of DCI having made a 77 min dive to 40m the previous afternoon. (Coastguard report).

July 2009 09/463

The casualty completed four dives, assisting on a deep diving course, w ithout incident; his maximum depth w as 34m. At home, after a show er, the casualty noticed a pain in the small finger of his right hand. He contacted a doctor who advised him to go to a recompression chamber for treatment.

July 2009 09/233

A pair of divers conducted a 40 min dive to a maximum depth of 52m. 1 hour 25 min later they dived to a maximum depth of 42m. As they made their return swim, at a depth of 25m, one of the pair inhaled a mouthful of w ater from his regulator. He switched to his pony cylinder and breathed very hard from this which caused it to free flow; he made a rapid ascent to the surface. His buddy did not see this happen and w hen he realised that the diver w as not w ith him he returned to depth to check. He then surfaced and found the diver at the surface swimming for the shore. He swam to him and asked him w hat the problem was; he did not get a coherent answ er and he towed the troubled diver to the shore. The troubled diver w as still not very coherent, claiming that there was no problem but not acting normally . The rescuing diver helped him from the water and placed him in the recovery position then w ent to phone the emergency services. The casualty w as airlifted to a recompression chamber but released later that day w ith no signs of DCI found. The casualty had no memory of the events from after he surfaced until the paramedics arrived to treat him.

July 2009 09/324

A diver conducted a series of tw o dives per day over a three day period. On the fourth day he dived to 37m for 33 min using nitrox 31 with a 2 min stop at 18m and a 4 min stop at 6m. On this last dive he had to swim strongly to get back to the boat.

Shortly after getting back on the boat he felt dizzy and experienced back pains. He breathed nitrox 31 until 100% oxygen was made available. The Coastguard w as alerted and the boat headed back to harbour. The diver's back pain resolved after about 10 min on oxy gen but he then became nauseous and w as violently sick. Once ashore the diver was taken by ambulance to a r ecompression facility w here he received three sessions of recompression treatment for vestibular and spinal DCI.

July 2009 09/234

A pair of divers conducted a dive to a maximum depth of 33m. After 33 min one of the pair deploy ed a delay ed SMB and they began their ascent. During the ascent the diver w ho w as not holding the SMB lost control of his buoyancy and was carried to the surface from 10m missing 16 min of stops. He w as recovered into the boat and placed on oxygen. The Coastguard was alerted and the diver w as airlifted to a recompression facility for treatment of DCI. His buddy ascended normally. The diver w as using a new tw in-set configuration and had not adjusted his w eight correctly. He had assumed that they would ascend the shotline but they could not find it in low visibility.

July 2009 09/218

Shetland Coastguard received a call from a dive boat reporting they had a diver onboard w ith signs of DCI following an uneventful dive profile. The diver w as placed on oxy gen and returned ashore w here they w ere met by an ambulance and Stromness Coastguard rescue team for the diver to be transferred to Stromness hy perbaric chamber for assessment and treatment. (Coastguard report).

July 2009 09/219

Shetland Coastguard received a call from a dive boat reporting that they were returning to port w ith a diver suffering signs and symptoms of DCI follow ing a 37m dive. The boat w as met by Stromness Coastguard rescue team and transported by ambulance to Stromness hy perbaric chamber for assessment and treatment. (Coastguard & RNLI reports).

July 2009 09/237

A pair of divers descended to the seabed at a depth of 26m to conduct a drift dive. They carried an SMB and had a buddy line to connect themselves together. There w as a strong current and they became tangled in the lines. One of the divers had her regulator pulled from her mouth and she reached for her octopus regulator but picked up her pony regulator instead. They were unable to untangle themselves so they started to ascend. During the ascent the SMB reel jammed and the other diver started to sink back down. His buddy put some air into his BCD and they both rose to the surface. The diver who had sunk back w as hyperventilating and, concerned that they might run out of air, they missed planned stops. Once in the boat the diver who had been hy perventilating show ed signs of DCI so the skipper alerted the Coastguard. Both divers w ere taken by helicopter and ambulance to a r ecompression facility for treatment.

July 2009 09/197

Two divers descended to a w reck at a depth of 25m. Visibility was very poor and one of the pair indicated that she w anted to abort the dive. They ascended to 14m at w hich point the troubled diver started to panic. Her buddy tried to slow her but she kicked free and made a rapid a scent to 6m. Other divers were still descending the shotline and the troubled diver held on to one of them tightly before losing consciousness. She started to sink back down and one of the other divers caught hold of her and brought her to the surface.

She was recovered into the boat and it w as found that she w as not breathing and had no apparent pulse. Resuscitation techniques were applied and the Coastguard w as alerted. The casualty started breathing spontaneously within a few minutes. She was airlifted to hospital w here an arterial gas embolism as a result of a burst lung w as diagnosed. She w as transferred to a recompression chamber for treatment and was discharged the following day . A week later she had residual sy mptoms of headache, some nausea and aches in her left thigh. She had no memory of the period from 10 min before the dive to the following day.

July 2009 09/223

Shetland Coastguard received a call from ambulance control, reporting divers in trouble at the end of a pier. An ambulance was en route, but the fire service w ere already on the scene and they reported that although they did not know w hat had happened, there w as at least one diver who was unconscious and required immediate evacuati on, possibly suffering from secondary drow ning. Coastguard helicopter R-1026 was tasked to airlift the diver to the HLS w here he w as met by the Coastguard rescue team and transferred to hospital in Clickimmin for treatment. (Coastguard report).

July 2009 09/238

A diver conducted tw o dives in a day . The following day he dived to 25m for 54 min w ith a 3 min stop at 6m. 2 hours 37 min later he dived to 24m for 39 min w ith a 3 min stop at 6m. Shortly after surfacing he noticed a pain in his upper right arm; initially he thought that this w as a muscular strain. Later the pain increased and he w as placed on oxy gen and diving medical advice was sought. The pain increased further and the diver attended a recompression facility. He w as recompressed and his symptoms resolved.

August 2009 09/240

A diver conducted a 59 min dive to 15m w ith a 3 min stop at 6m. 3 hours 21 min later she dived to 16m for 69 min w ith a 3 min stop at 6m. The following day she dived to 18m for 62 min with a 5 min stop at 6m, then, 3 hours 11 min later to 13m for 67 min with a 3 min stop at 6m. Later that day she noticed a slight tingling in her left hand; this sensation had gone when she awoke that night. Early the following morning she awoke lying on the arm and had 'pins and needles' in her hand and arm, however this did not fully resolve when she moved her position. She continued to experience a s light tingling in her left hand and later that morning she sought diving medical advice. She attended a recompression chamber and was given three sessions of recompression treatment. This treatment left the casualty concerned that the sy mptoms may not have been fully resolved.

August 2009 09/225

A 16 year old diver show ing sy mptoms of DCI follow ing a 56 min dive at 47m was transferred onto the Whitby lifeboat and then evacuated by RAF rescue helicopter R128 to the recompression chamber in Hull. (Coastguard & RNLI reports).

August 2009 09/249

Three divers conducted a dive to a maximum depth of 24m. One of the pair was using a new mask and this kept misting up throughout the dive. He began to feel ill and indicated to his buddies that he w anted to ascend, he then vomited through his regulator. This combined w ith his fogged up mask and low underwater visibility caused him to panic. He inflated his BCD and made a rapid ascent to the surface. Once at the surface he calmed down. Later that day he began to w orry about DCI and he sought diving medical advice by phone, he w as advised to

call back if he developed sy mptoms. During the night he developed a pain in his arm and num b fingers. He re-contacted the medical advice and w as told to attend a local recompression facility. He r eceived tw o sessions of recompression treatment. He believes that a large, fried breakfast shortly before the subject dive w as a contributory factor to him feeling unwell.

August 2009 09/304

A pair of divers conducted a 46 min air dive to a maximum depth of 34m including an 11 min decompression stop at 3m on nitrox 50. 2 hours 18 min later they dived on air to 23m for 28 min with a 3 min safety stop at 6m. After this dive one of the pair felt pain down the side of her breasts. A little later the pain had increased and a skin rash appeared on her back. The diver w as placed on oxy gen and they sought diving medical advice. Once ashore the diver w as taken to a recompression facility and treated for DCI.

August 2009 09/228

A diver suffering from DCI w as transferred from Dover to the recompression chamber at Whipps Cross hospital in London by Belgian rescue helicopter R92. (Coastguard & RNLI reports).

August 2009 09/363

Solent Coastguard received a call from a dive boat reporting that they had returned to harbour and had a diver onboard w ith suspected DCI. Coastguard rescue helicopter R-104 w as tasked to airlift the casualty to a hyperbaric chamber, but before they arrived, it w as reported that the diver had been taken by ambulance. There are no further details available. (Coastguard report).

August 2009 09/265

Shetland Coastguard received a call from a dive boat reporting that they w ere returning to harbour w ith tw o divers w ho had missed decompression stops after a dive to 37m. They were showing no signs or sy mptoms of DCI, but had been placed on oxygen as a precaution. The boat was met by an ambulance on return for transfer to the hy perbaric chamber. The divers were released following a short treatment. (Coastguard report).

August 2009 09/253

Portland Coastguard received a call from a dive boat reporting that they had a rebreather diver onboard who was feeling ill about 2 hours after conducting a 116 min dive to a maximum depth of 55m Medical advice from a dive doctor w as that the diver should be evacuated to a hy perbaric chamber. The diver was airlifted by rescue helicopter R-106 to the HLS w here they were met by Poole CRT and an ambulance for transfer to the hyperbaric chamber at Poole. Following the hyperbaric treatment the diver was still unw ell so he w as tr ansferred to hospital for further assessment and treatment. He received tw o sessions of treatment for a vestibular DCI. The diver had conducted a similar dive the day before. (Coastguard report).

August 2009 09/364

Clyde Coastguard received a 999 call from a dive boat reporting that they had a diver w ho w as display ing signs of DCI more than 2 hours after surfacing from a dive. Medical advice w as that the diver should be evacuat ed to a hy perbaric chamber for assessment as a precaution. The boat returned ashore where they were met by Loch Aline CRT for transfer to Oban AWLB so they could take him to the hyperbaric chamber at Dunstaffnage. (Coastguard report).

August 2009 09/257

Brixham Coastguard received a ca ll from a dive boat reporting they had a diver onboard w ho had made an uncontrolled ascent and was show ing signs of DCI. Medical advice taken from a dive doctor w as that she s hould evacuated to a hyperbaric chamber. Ply mouth AWLB proceeded to stand by the boat while the diver w as airlifted by rescue helicopter R-193. The diver was taken to the HLS where he was met by an ambulance for transfer to the hy perbaric chamber at DDRC Ply mouth. (Coastguard report).

August 2009 09/255

A rebreather and an open circuit di ver conducted a dive to a maximum depth of 29m. After about 24 min the rebreather diver deploy ed a delay ed SMB for their ascent. The open circuit diver caught his mask strap on the SMB line and w hile sorting this problem out he ascended a few metres. Despite venting air he became positively buoy ant and w as carried directly to the surface missing 2 min of mandatory decompression stops. His ascent took about 1 min. The rebreather diver follow ed him but more slow ly, he paused for a few seconds at 6m before surfacing. Once back on the boat the diver who had made the buoyant ascent w as placed on oxy gen and the rebreather diver breathed oxy gen from his set. Diving medical advice w as sought and the Coastguard was alerted. The boat was met by an ambulance back in the harbour and the two diver s w ere taken to a r ecompression facility. The diver who had made the buoy ant ascent w as found to have slight balance problems and he w as recompressed. He made a full recovery and doubts w ere expressed about the cause being DCI. This diver had recently sw itched from using his BCD to using only his suit for buoyancy control.

August 2009 09/256

Dover Coastguard received a call from a dive boat reporting they w ere on their w ay back to harbour and had a diver w ho was show ing signs of DCI shor tly after surfacing follow ing a normal ascent. Medical advice w as that the diver should be taken to a hyperbaric chamber. The boat w as met on return by an ambulance and Eastbourne CRT for airlift by rescue helicopter R-104 to the hy perbaric chamber at Whipps Cross hospital London. (Coastguard report).

August 2009 09/258

A diver suffering from serious DCI w as treated in a recompression chamber. (Media report).

August 2009 09/269

A diver conducted a 43 min dive to 24m w ith a 2 min stop at 14m and a 2 min stop at 6m. The diver had experienced some problems w ith ear clearing during the descent and traces of blood were visible in his mask on surfacing. Shortly after surfacing he complained of pain and tightness in his chest and midriff w hen breathing. The casualty was given water, laid down and placed on oxy gen. The Coastguard w as alerted and the boat returned to harbour. The casualty developed 'pins and needles' in his left hand. He w as taken to hospital, kept in overnight and discharged the follow ing day; the diagnosis was 'trapped air in gut'. The casualty still felt unwell and he developed 'pins and needles' in his legs during the day . The following day he went with his buddy to a recompression facility, by this time he w as also having balance problems. He w as given recompression treatment and a mild DCI w as diagnosed. It w as thought that the original pain was unrelated. The casualty w as left w ith mild 'pins and needles' in his legs and these symptoms resolved during subsequent days.

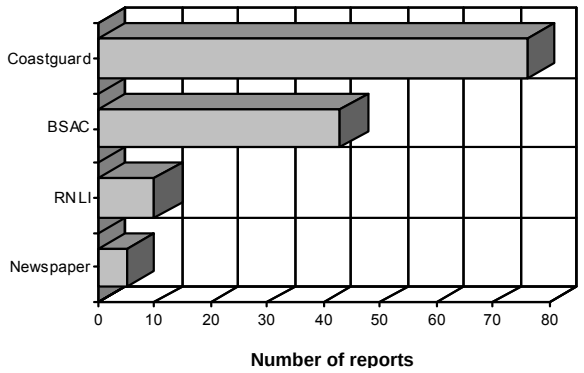
August 2009 09/368

Forth Coastguard received a call from the ambulance service reporting that they had received a call about a diver ashore who was suffering from tingling in the fingers following his dive. Eyemouth CRT proceeded to assist and the diver was airlifted to the hyperbaric chamber at Aberdeen Royal Infirmary by rescue helicopter R-177. (Coastguard report).

August 2009 09/306

A pair of divers conducted a dive to a maximum depth of 29m. They deployed a delayed SMB to make their ascent. Their ascent was faster than intended and at 10m they stopped and re-descended to 15m to regain control. At this point one of the pair moved away from the SMB line and seemed to have a problem with his mask. He signalled that he was not happy and wanted to ascend and then made directly for the surface. The other diver made a more normal ascent, completing stops at 6m and 3m. Once back in the boat the diver who had made the rapid ascent and missed stops was placed on oxygen. The Coastguard was alerted and the diver was airlifted to a recompression facility for treatment.

Decompression data source analysis



August 2009 09/261

Two divers conducted a drift dive to a maximum depth of 24m. After 30 min they made a normal ascent with a 3 min safety stop at 6m. Their total dive time was 37 min. Shortly after getting back into the boat one of the pair experienced a pain in her lower ribs. This pain worsened, she developed a 'strange sensation' in her feet and lower legs and felt as is she was about to pass out. She lay down and was placed on oxygen. The boat returned to harbour and the diver's condition improved. Once ashore she sought diving medical advice via the Coastguard. She was airlifted to a recompression chamber where she was successfully treated for DCI. The casualty had been involved in a car accident 6 months earlier during which she lost consciousness; it was suggested that tissue scarring from this previous accident had left an area prone to bubble formation.

August 2009 09/262

A diver completed a six day diving programme with depths down to 40m. On her last day, using nitrox 25, she dived to 38m for 28 min with a 7 min stop at 6m. 2 hours later she dived to 29m for 49 min with a 16 min stop at 6m. Shortly after this last dive the diver mentioned an itchy feeling on her skin and a circular bruise was found; this spread to become a rash. The diver was placed on oxygen and the Coastguard was contacted. The boat was in harbour and an ambulance and doctor attended. The doctor diagnosed an allergic reaction and administered an anti-histamine drug. One of the other divers suggested that it could be DCI and persuaded the doctor to seek diving medical advice. The diver was then airlifted to a recompression chamber where treatment resolved her symptoms.

September 2009 09/374

Belfast Coastguard received a call from a dive centre reporting that one of their boats was returning to shore with a diver onboard who was complaining of symptoms of DCI. Ballycastle CRT and an ambulance were sent to meet the boat and when they arrived medical advice was taken from a dive doctor. The doctor recommended immediate transfer to Craigavon hyperbaric chamber, so the diver was taken by ambulance. (Coastguard report).

September 2009 09/270

Two trimix divers using a 21/35 mix conducted a dive to 45m for 77 min including 27 min of decompression stops during which one diver used nitrox 50 and the other used nitrox 60. The following day they dived to 40m for 70 min including 32 min of stops, using the same gases as the previous day. During the decompression stops one of the pair noticed a pain in her left elbow. Upon surfacing the pain was still present and she was placed on oxygen. The other diver then reported that he felt dizzy. The Coastguard was alerted and the divers were airlifted to hospital. During the flight the diver who had become dizzy suffered from low blood oxygen concentration and diminished consciousness, he also developed altered sensation in his legs. Both divers were given recompression treatment. The first casualty exhibited only mild symptoms of pain, the second casualty had vestibular and additional neurological symptoms and he required further sessions of treatment. It was recommended that this casualty should be tested for a PFO. (Coastguard report).

September 2009 09/378

Shetland Coastguard received a call from a dive boat with a diver onboard who had a dilated pupil following a deep dive with a normal profile and displaying no other signs or symptoms of DCI. The boat returned to harbour to be met by Stromness CRT who assisted with the transfer by ambulance to Stromness hyperbaric chamber for treatment. (Coastguard report).

September 2009 09/273

Two pairs of divers conducted a dive to a maximum depth of 34m. At the end of their dive they ascended a shotline. There were other divers on the line and a current was running. At 15m they found the shot buoy, pulled down by the drag of the divers in the current. They were pulled down to the seabed at a depth of 34m. One pair left the line and ascended, at 6m they deployed a delayed SMB but sank back to 14m in the process. One of the divers was now low on air and had difficulty staying down, he surfaced having completed 2 min of an indicated 7 min stop, his buddy also had buoyancy problems and she surfaced missing 4 min of stops. The second pair became separated from each other when one released the sunken shotline and the other didn't. This other diver made a rapid ascent directly to the surface. The diver who had released the line made a normal ascent including all necessary stops. Back in the boat the diver who had made the rapid ascent was diagnosed with symptoms of DCI and the diver who had missed 4 min of stops developed a slight numbness in her left hand and a pain in her thumb. The other two divers were monitored for signs of DCI but none were found. The Coastguard was alerted and a lifeboat was launched to assist. The two divers who had

symptoms received recompression treatment; the diver w ho had made the rapid ascent required two sessions.

September 2009 09/383

Shetland Coastguard received a call from a dive boat reporting they had a diver onboard w ho w as feeling unw ell follow ing a normal dive profile. An ambulance was sent to meet the boat in harbour and the diver w as transferred to the hy perbaric chamber for treatment. (Coastguard report).

September 2009 09/386

Brixham Coastguard received a call from port control that they had been informed of a dive boat returning to the harbour with a diver onboard who was unwell. Medical advice from a dive doctor was that the diver should be taken first to hospital for x-rays before being transferred to the hyperbaric chamber at DDRC Plymouth for treatment. (Coastguard report).

September 2009 09/385

Milford Haven Coastguard received a 'Pan Pan' urgency call from a dive boat on their way back to shore with two divers who were feeling unw ell follow ing their dive. Medical advice taken from Aberdeen Roy al Infirmary w as that the divers should be airlifted immediately for treat ment. Rescue helicopter R-169 airlifted the divers to the hy perbaric chamber at DDRC Plymouth for treatment. (Coastguard report).

September 2009 09/389

Humber Coastguard received a call from Berwick Hospital requesting an airlift for a diver with DCI. The diver w as airlifted by rescue helicopter R-131 to Hull hy perbaric chamber for treatment. Berwick & Hull CRTs assisted at the helicopter landing sites at the hospital and hy perbaric chamber. (Coastguard report).

September 2009 09/309

A diver completed a series of dives over a number of days. On the day of the incident he dived to 38m for 27 min w ith a 2 min stop at 9m, a 3 min stop at 6m and a 1 min stop at 3m. 3 hours 10 min later he dived to 36m fo r 36 min including a 1 min stop at 9m, a 4 min stop at 6m and a 2 min stop at 3m. Once back in the boat he got out of his dry suit and started to get changed. At this point he became unw ell; colour drained from his face and he became lethargic. A doctor w ho was on a nearby boat attended the casualty , he w as placed on oxygen and the Coastguard was alerted. The boat returned to shore and the diver was taken to hospital for tests as there w as concern that he might have had a heart attack. No sign of heart attack w as found and the diver w as transferred to a recompression chamber for treatment. The diver was very weak and unable to walk into the chamber. The diver had a further session of recompression treatment. He had previously suffered from DCI.

September 2009 09/310

A diver conducted a series of dives over a three day period. On the third day, after an 18 hour surface interval, he dived to 39m for 39 min w ith a 1 min stop at 6m and a 22 min stop at 3m. About 40 min after surfacing he started to feel vertigo and this led to nausea and sickness. The Coastguard was alerted and the diver w as placed on nitrox 79. The diver w as taken ashore and then transferred to a recompression chamber by ambulance. He received four sessions of recompression treatment over a four day period.

September 2009 09/391

Shetland Coastguard received a call from a dive boat reporting that they were returning to shore w ith a diver who was suffering problems with his sight. The boat w as met by Stromness CRT and an ambulance and w as transferred to Stromness hyperbaric chamber for assessment. (Coastguard report).

September 2009 09/393

Humber Coastguard received a 999 call from a dive boat which had already returned ashore, reporting they had a diver w ho had missed stops and w as reported as having been unconscious w hile underw ater, but w as show ing no signs or symptoms of DCI. Medical advice from a dive doctor w as that the diver should initially be air lifted to hospital. Amble CRT assisted with transferring the diver to rescue helicopter R-131 which flew him to hospital w here he w as met by Hull CRT to assist with the transfer to hospital by ambulance. He w as later transferred to Hull hy perbaric chamber for treatment. (Coastguard report).

September 2009 09/394

Brixham Coastguard received a request for medical advice from a dive group ashore. They had a diver w ho was showing signs of a skin DCI. They had already tried to contact DDRC Plymouth themselves but had failed to get through. Brixham contacted the duty doctor and put them in direct contact with the diver, who did not need treatment. (Coastguard report).

September 2009 09/312

A diver conducted a 26 min dive to 30m w ith a 3 min stop at 6m. 2 hours later he dived to 25m for 33 min with a 3 min stop at 6m. About 30 min after the second dive he reported 'pins and needles' in both his legs. The Coastguard was alerted and the diver w as placed on oxy gen. Once ashore the diver was taken by ambulance to a r ecompression facility w here he was successfully treated for DCI. It is reported that the diver's computer ascent rate alarm had activated a number of times during the ascent and it is thought that rapid ascent may have been a causal factor.

September 2009 09/397

Shetland Coastguard received a call from a dive boat reporting they were returning to harbour w ith a diver w ho w as feeling unwell follow ing a seemingly normal dive profile. They were met by an ambulance w hich took the diver to Stromness hyperbaric chamber for treatment. (Coastguard report).

Injury / Illness

October 2008 09/443

The casualty complained of pain in chest following a rapid ascent from 4m. Transferred to chamber but no treatment needed.

October 2008 09/061

The Coastguard was alerted after a diver surfaced from an 18m dive feeling unwell. She had swallowed some seawater and was a little hypothermic, having over-exerted herself during the dive. She was taken to hospital. (Coastguard report).

October 2008 09/009

A diver conducted a 34 min dive to 32m including a 3 min stop at 6m. 1 hour 53 min later he dived to 20m for 38 min with a 3 min stop at 6m. Shortly after the second dive he felt unsteady and sought advice. He was placed on oxygen for 20 min. After this he felt fine and it is not thought that further action was taken.

October 2008 09/008

A pair of divers conducted a dive to a maximum depth of 20m. They were at a depth of 16m when they became separated. They found each other again at a depth of 6m where they conducted a 1 min safety stop. They surfaced after a dive time of 32 min. One of the pair was exhausted and a boat was launched to recover both divers. The exhausted diver was placed on oxygen but no further treatment was required.

October 2008 09/444

The casualty was setting up a scuba unit at poolside. The casualty turned the air on, whilst holding the high pressure hose near the first stage. The high pressure hose burst in the casualty's hand causing a deep laceration which required first aid and transfer to the emergency services for sutures.

October 2008 09/013

A diver dived to a maximum depth of 26m but failed to equalise the pressure in his face mask. He returned to the surface after a dive duration of 5 min and complained of blurred vision and severe swelling of his eyes. The Coastguard was alerted and medical advice was sought. Once ashore he went to hospital. The diver later reported that he either forgot or was unable to equalise the pressure; he was not sure which.

November 2008 09/020

A diving instructor was assisting a group of trainees from the water on a slipway. While removing her fins she slipped over and injured her left ankle. She was taken by ambulance to hospital for treatment.

November 2008 09/054

The Coastguard was alerted when a diver complained of a back injury, she was holding on to the side of a dive boat. A lifeboat was tasked to assist and the diver was transferred by ambulance to hospital. (Coastguard report).

November 2008 09/018

A diver on her second dive in UK waters conducted a dive to a maximum depth of 17m. She suffered mask squeeze and as she tried to solve the problem she dislodged her mouthpiece and swallowed some water. This caused her to panic and she made a rapid ascent to the surface. She was recovered into the boat but she was very distressed and was sick. The Coastguard was alerted and medical advice was sought. The diver slowly recovered and no further action was required.

November 2008 09/446

The casualty cut her hand on a sharp tile in the pool. She was assisted out of the water and first aid was administered. It was decided that the casualty needed medical assistance so she was transferred to see a nurse at a walk in centre.

January 2009 09/448

The casualty completed a dive and after exit complained of feeling dizzy and of nausea. Oxygen and first aid were administered. He was monitored for any further symptoms and advised not to dive again that day.

February 2009 09/036

A diver conducted a dive to a maximum depth of 30m. He had been suffering from a cold and had taken Sudafed prior to the dive. He experienced no problems during the descent but when he tried to ascend at the end of the dive he experienced pain in his right ear at 28m; this pain increased rapidly with a small decrease in depth. He re-descended, swallowed a few times and then ascended much more slowly. He had no further problems during the rest of this dive and surfaced after a duration of 54 min. Once out of the water he noticed that the hearing in his right ear was badly impaired but put this down to trapped water. 2 hours 15 min later he dived to 20m for 60 min with no further problems. On his way home he noticed a small amount of blood coming from his ear and a 'spongy' feeling developed in his face around the ear. He went to his local hospital and was referred to a specialist. He saw the specialist eight days after the dive and a small perforation of the eardrum was diagnosed. The injury was healing well.

February 2009 09/051

The Coastguard was alerted when a diver complained of breathing difficulties after a dive. He was brought ashore by his dive boat then taken to hospital by ambulance. (Coastguard report).

March 2009 09/042

A pair of divers conducted a dive to a maximum depth of 18m. They had just turned to swim back to their exit point when one of the pair experienced a severe pain in her left knee. She signalled to her buddy that she had a problem, he took hold of her BCD and they made a normal ascent to the surface; their dive duration was 26 min. At the surface the diver explained the problem and that she could not fin. Her buddy towed her to the shore and she was assisted from the water. She was taken by ambulance to hospital. The diver had had an operation to repair a torn cruciate ligament in her left knee 6 years earlier and had been problem free since. It was not thought that the problem was caused by the dive.

March 2009 09/451

The casualty was completing an orientation dive of the site, her maximum depth was 6m. Safety stops were completed then, on surfacing, the casualty complained of a headache and feeling queasy. The casualty dekitted then said that the symptoms were worse. First aid and oxygen were administered. She was transferred to local hospital for check up; no further treatment.

March 2009 09/087

Three divers entered the w ater in a harbour w ith the intention of locating an underw ater guideline. They swam a little off-course and after 33 min they surfaced much further from the exit point than intended. During the return surface sw im one of the four felt that he could not get enough air, he became distressed and removed his mask and mouthpiece. One of the other divers assisted him and, as they reached calmer w ater, the troubled diver regained composure. They all left the w ater safely and no subsequent ill effects were experienced.

March 2009 09/088

A trainee was on her third open water dive. At one point she lost control of her buoyancy and surfaced too quickly from a depth of about 10m. After checking that she was alright the instructor and the trainee re-descended the shotline and continued to a depth of 13m. They then sw am up a gentle slope tow ards the exit point. At 8m the instructor signalled the trainee to dump air using her BCD dump valve. T he trainee moved into an upright position and the air in her suit started to lift her. The instructor signalled that she should use her cuff dump but before she could do so she made a buoy ant ascent to the surface. During the ascent she suffered a reversed ear and burst her left eardrum. Their dive duration w as 25 min. Once out of the w ater she w as placed on oxy gen and diving medical advice w as sought. She went to hospital where the burst eardrum w as confirmed. The diver w as seeking further medical advice. She had been on antihistamines follow ing w hat w as thought to have been a dust allergy at work.

March 2009 09/089

A diver conducted a 37 min dive to a maximum depth of 20m with a 3 min stop at 6m. 3 hours later she dived to 19m. During this dive, at a depth of 16m, the dive leader noticed that she appeared unw ell; he gave her the OK signal and she indicated that all w as not w ell. The dive leader noticed that the troubled diver's eyes seemed to be closing and he brought her to the surface using a controlled buoyant lift. Their dive duration w as 15 min. At the surface the alarm w as raised and the diver w as recovered from the water. She was placed on oxygen. She was conscious at the surface but could not remember the last part of the dive. The emergency servic es w ere alerted and she was taken to hospital. Her only sy mptom was a severe headache. Once in hospital her condition deteriorated and she w as taken to a recompression facility for treatment. Subsequent tests showed that this diver had a PFO.

April 2009 09/096

The Coastguard was alerted when a diver surfaced having made a rapid ascent from a dive to 34m. His dive duration was 24 min. The diver could not clear his mask at depth and, after a few failed attempts, he decided to surface. At 20m he could not see the dive computer clearly and, in his confusion, he lost control of his buoy ancy and rose rapidly to the surface. Once in the boat his awareness level seemed to be impaired. He w as placed on oxygen. Diving medical advice w as sought and the diver was airlifted to a recompression facility for precautionary treatment. He was diagnosed with 'stomach bloating' thought to be due to him having ingested air duri ng the dive w hich expanded on ascent. It is thought that nitrogen narcosis may have played a part in this incident. (Coastguard report).

April 2009 09/243

A diver was at a depth of 26m using independent tw in cylinders. During the dive he sw itched to the second cy linder and experienced sickness, headache and dizziness. He changed back to the first cy linder and aborted the dive. His symptoms cleared within 30 min of surfacing. He reports that there w as a taste to the air.

April 2009 09/098

Falmouth Coastguard received a report from a dive boat that they had a diver onboard w ho had surfaced and w as show ing signs of distress, had a grey pallor and a severe headache following a second dive of the day . A medi link call w as arranged with the duty diving doctor at DDRC Ply mouth, w ho advised that the diver should be placed on oxy gen and both the diver and her buddy should be transferred to the DDRC Plymouth by ambulance for observation and treatment as soon as she returned ashore. (Coastguard report).

April 2009 09/452

At a depth of 25m the casualty was attempting 'out of air' drill when she placed her buddy 's regul ator in her mouth upside down. She attempted to clear the regulator but then sw itched back to her own. She struggled to clear the regulator so aborted dive. At the surface the casualty complained of pain. Oxy gen was administered and the emergency services were contacted.

April 2009 09/453

Diving at a depth of 3m the casualty 's fin w as bent back the wrong w ay and she signalled to the instructor that she had a problem w ith her chest. The inst ructor checked the casualty 's BCD. The casualty wanted to ascend. The group ascended and the casualty complained of a shortness of breath and a pain in her ankle. First aid w as admin istered and she was transferred for check up by the emergency services.

April 2009 09/110

Portland Coastguard received a call for medical advice from a dive boat with a diver onboard w ho w as suffering dental pain following diving. Medical advice from a dive doctor at Poole hyperbaric chamber w as that t he diver should attend hospital A&E as it seemed that the problem w as most likely dental trauma caused by air in a gap in a tooth. (Coastguard report).

April 2009 09/315

A diver w as participating in an oxy gen administration and resuscitation course w hen he s uddenly collapsed onto the floor. He was sweating profusely and had no visible sign of a pulse. After about 2 min he started fitting and then regained consciousness. He w as very confused but stated that this had happened before. An ambulance w as called and he w as taken to hospital. The diver had not previously declared a medical problem.

May 2009 09/302

A pair of divers entered the water from the shore and dived to a maximum depth of 7m. During the dive they became disorientated and swam back towards a rocky shore. One of the pair felt uneasy during the dive. They sw am into a rocky gully where the sw ell w as surging in and out and they had to swim hard to get out again. The diver who felt uneasy became exhausted and climbed onto a rock to rest. Her buddy signalled to her and she got back into the w ater to continue the sw im to the exit point. She quickly became exhausted again and climbed onto another rock. She signalled for help and other divers came to her and brought her ashore. She received a cut to her shin which required hospital treatment. It w as suggested that her semi-drysuit neck seal may have been too tight and that this could have caused her exhaustion.

May 2009 09/140

Falmouth Coastguard received a call from a dive boat requesting medical advice for a diver w ho had a sore shoulder follow ing a deep dive, with a normal ascent, although his shoulder was sore before the dive. Medical advice from DDRC Plymouth was to give oxygen and for the boat to continue back to port. The diver was also advised to monitor his condition, calling DDRC again for advice if there was any further concern. (Coastguard report).

May 2009 09/414

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

May 2009 09/455

After a dive to 13m the casualty w as seen being towed by his buddy on the surface. He w as not breathing so rescuers removed him from the lake, commenced resuscitation and called the emergency services. After approx 10 min the casualty began to breathe and gradually regained consciousness. Oxygen was administered,

May 2009 09/136

A pair of divers conducted a 28 mi n dive to a maximum depth of 18m with a 4 min safety stop at 6m. During the descent one of the pair felt his right ear suddenly get colder and he heard a whistling sound in this ear during the dive. After the dive he found that a discharge w as coming from this ear. He sought diving medical advice and a perforated eardrum was diagnosed.

May 2009 09/296

A pair of divers entered the w ater to descend a shotline to a wreck in a maximum depth of 30m. One of the pair missed the shotline and descended aw ay from the line. The divers met up on the wreck and the dive leader noticed that the diver w ho had missed the line was very tense, his eyes were wide open and his fists were clenched. The dive leader brought the troubled diver back up the shotline and they made a 4 min stop on the w ay. At the surface the troubled diver was confused and unable to help himself. He w as recovered into the boat and placed on oxygen. He made a quick recovery and no further action w as required. He could not explain his panic underw ater but had had little sleep the previous night and was exhausted.

May 2009 09/456

At a depth of 9m the casualty lost his regulator in bad underwater visibility w hile the instructor w as helping another student. The casualty w ould not accept the instructor's alternative air source so the instructor made an emergency ascent with the casualty . On the surface the casualty complained of chest pain so oxy gen was administered and the emergency services w ere called. No further actions w ere needed after examination.

May 2009 09/138

A diver entered the w ater from a boat by rolling in backwards from the side. His buddy followed him and landed on top of him. The first diver received a severe cut to the top of his head. Once ashore he was taken to hospital w here six stitches were required to close the wound.

May 2009 09/146

Solent Coastguard received a call from ambulance control advising that they had received a call regarding a diver w ho had surfaced shortly after her descent, w as feeling sick and dizzy and coughing up blood. She had dived to 11m. Rescue helicopter CG 104 w as tasked to evacuate the diver. It w as met at the landing site by an ambulance and Poole CRT and the diver was transferred to the hyperbaric chamber for treatment. It transpired that the call to the ambulance w as made by an unknown person. On discussion w ith the diver's club it w as discovered that this w as her first open w ater dive and she had surfaced with blood in her mask which was considered to due to mask squeeze and nothing w as done about it. The club was advised that if a person display s symptoms of any sort following a dive, however minor, it should be reported to the Coastguard for medical advice. (Coastguard report).

June 2009 09/457

The casualty completed a dive w ithout incident and made a 3 min safety stop. On the surface the casualty could not see the dive boat and she became panicked and short of breath. She was assisted into a boat as she w as exhausted. Oxy gen w as administered and the casualty w as recompressed as a precaution.

June 2009 09/458

The casualty completed a dive w ith no issues. Some time later he was putting on his undersuit w hen he complained of a painful hand w hich w ent into a cramp like spasm. He complained of feeling sick so oxy gen w as administered. The casualty moved his hand until it clicked and he then felt better. He was advised to see his doctor.

June 2009 09/203

Four divers conducted a shore di ve to a maximum depth of 12m. There w as a strong current and one of the three became separated from the group. After a short search for the missing diver the three surfaced. The missing diver also surfaced and made his way back to shore. The shore line was rocky and wave action made his exit difficult. He slipped and fell on his right shoulder. He w ent to the local A&E w here an undisplaced fracture of the head of his humerus was diagnosed.

June 2009 09/316

A diver conducted three dives in a day and tw o dives on the second day. On day two he dived to 27m for 33 min with stops of 2 min at 9m, 3 min at 6m and 5 min at 3m on his ascent. 2 hours 10 min later he dived to 28m for 32 min w ith a 3 min stop at 9m, a 3 min stop at 6m and a 3 min stop at 3m. Shortly after arriving back on shore he complained of a numbness from above his right knee to his foot. He was given water to drink, placed on oxygen and the Coastguard w as alerted. Diving medical advice was sought by phone and the diver w as asked to carry out some balance tests. During this time the numbness eased. It was thought unlikely that he had DCI but he w as advised to attend a hospital for examination, this he did. No DCI was found and the diver was released.

June 2009 09/343

Yarmouth Coastguard received a call from a dive boat w ith a diver onboard w ho had suffered a badly cut finger while on a wreck dive, despite w earing gloves. The boat returned to shore and the diver w as met by Happisburg CRT and Sea Palling ILB. He w as taken to hospital by ambulance for treatment. (Coastguard report).

June 2009 09/419

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

June 2009 09/459

At a depth of 9m the casualty began mask clearing practice but he started to panic and spat his regulator out. The instructor tried to replace his regulator but the casualty made a rapid

ascent to the surface. He complained of severe headaches so the emergency services were called. Oxygen was administered and the casualty was taken to hospital for further examination.

June 2009 09/180

Two divers entered the water to dive a wreck. The first diver descended the shotline but, as the second diver started to descend, the shot buoy hit his regulator knocking it from his mouth. This diver was breathing in at the time and he inhaled a quantity of seawater. He was able to retrieve his regulator but it was dislodged again and he took in further mouthfuls of water. He quickly became distressed and was in danger of sinking. The skipper alerted the Coastguard and approached the struggling diver. A line was thrown to him but he was unable to grasp it. The boat approached again and again the diver was unable to grab the line. Another diver jumped in to assist but was unable to get the regulator back into the struggling diver's mouth. Eventually they were able to manoeuvre the diver to the boat's diver lift and he was removed from the water. Once in the boat he was placed in the recovery position and given oxygen. He quickly recovered. His buddy waited for him at the bottom of the shotline but resurfaced once he realised that his buddy was not going to join him. The troubled diver was airlifted to hospital because of fears of secondary drowning. He was released, fully recovered, later that evening. It is thought that the diver's BCD was inadequate to support the weight of the twin-set that he was using.

June 2009 09/181

A pair of divers entered the water and started to descend a shotline to a wreck in a maximum depth of 34m. One of the pair had a leaky neck seal on his dry suit and he agreed with his buddy that he would abort the dive if it gave problems and that the buddy would continue without him. The buddy swam downwards and the diver with the leaky seal followed. At 2m the regulator of the diver with the leaky seal stopped providing air so he swapped to his alternative air source. However, he did not have enough breath to clear this regulator and as he breathed in he inhaled some water which caused him to cough. He remembers dumping his weightbelt but then he lost consciousness. His buddy waited at the bottom of the shotline then assumed that he had had a problem with his neck seal and aborted the dive so the buddy continued his dive. The boat was picking up the first pair to surface when they noticed the troubled diver's fins at the surface. They moved towards him and found him on his back with only the lower part of his legs and fins out of the water, his regulator was out of his mouth, his face was blue and his eyes were bulging and bloodshot. They removed his diving equipment and recovered him into the boat. The Coastguard was alerted and some of the other divers from the party were recovered. The diver was placed on oxygen, he was unconscious and his breathing was noisy. Three lifeboats and a helicopter were tasked to assist and the diver was airlifted to hospital. Attempts had been made to fill the casualty's BCD with air when it was dumped so that it could be recovered later, however, despite extensive surface searches it was not found. It is believed that the casualty's air had been turned on prior to the dive and it was suggested that contact with the shotline may have switched it off. The casualty made a good recovery and was released from hospital two days later.

June 2009 09/170

A pair of divers conducted a drift dive in a maximum depth of 24m. As planned, a delayed SMB was deployed when one of the divers reached 100 bar. They started their ascent but at 15m one of the pair experienced breathing difficulties and reported that her legs had 'turned to lead'. They continued to 10m where the buddy took the SMB reel from the troubled diver as she was in obvious distress. At 6m the buddy signalled a 3 min stop but the troubled diver signalled 'No' and they both made a rapid ascent to the surface. The buddy signalled for help and both were quickly recovered from the water. The distressed diver, who was now vomiting, was placed on oxygen and the Coastguard was alerted. The casualty was airlifted to hospital where it was found that she had ingested water. It is thought that a borrowed mask contributed to the problems.

June 2009 09/344

Solent Coastguard received a call from a local work boat advising that they had been approached by a dive boat with a request to call an ambulance for a diver who was unwell. It had been necessary for the dive boat to travel some 15 miles to get back to port, and they had not at any time informed the Coastguard, or requested assistance from them. Advice from the duty diving doctor via Solent Coastguard was to breathe oxygen for 6 hours and monitor the condition of the diver. (Coastguard report).

June 2009 09/461

The casualty made a giant stride entry into a pool. On surfacing the instructor noticed she was bleeding from the back of her head as she had hit her head on her regulator first stage. The casualty was assisted out of the pool and first aid was administered. She was then taken to hospital for a check-up.

July 2009 09/426

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

July 2009 09/282

A diver experienced pain in his ear following a dive and during the following night. He sought medical advice and his eardrum was found to be inflamed and 'indrawn', he also had a blocked Eustachian tube. He was given pain killers and decongestants. It is reported that he normally descended head first and at a fast rate.

July 2009 09/462

The casualty was making a descent and he had problems equalising the pressure in his ears. When he reached the bottom, at a depth of 23m, he felt dizzy so he made a controlled ascent and safety stop. He was checked at hospital and no eardrum rupture was found but he had water in his ear and he was advised not to dive for the weekend.

July 2009 09/214

Stromness lifeboat transferred a sick diver from her dive boat to Houton pier in Orkney where she was met by an ambulance which took her to Stromness for treatment. (Coastguard & RNLI reports).

July 2009 09/354

Falmouth Coastguard received a call from a dive boat reporting that they had a diver onboard with suspected DCI. However a hyperbaric medic who was on the boat assessed the diver and considered the symptoms to be related to seasickness. (Coastguard report).

July 2009 09/235

Three divers conducted a wreck dive to a maximum depth of 31m. During their ascent back up the wreck one of the divers appeared unhappy and clung to the wreck. They signalled the ascent and one of the divers led the troubled diver back to the shotline and helped her to ascend. They completed a 2 min stop at 6m and a 1 min stop at 3m. Once at the surface the troubled diver was out of breath and very distressed. She vomited and

was very pale. She w as assisted from the w ater and her condition w as monitored during the return journey . On the way she was sick again. Once ashore she w as able to walk, but was very tired and her breathing w as noisy . An hour later her condition had not improved and she attended the local hospital. Inhalation of water and/or vomit w as diagnosed and she w as taken by lifeboat to a hospital w here she w as observed overnight. She was discharged the following day with antibiotics. She later reported that she had dislodged her regulator when looking up during the ascent.

July 2009 09/221

Brixham Coastguard received a call from a boat reporting tw o divers in difficulty . Along with the boat reporting proceeding to assist, a local police boat w as assigned by the police control, a local fishing boat offered assistance, and Ply mouth ILB w as tasked to investigate. It w as found there w ere two divers diving from the shore w ho had been sw ept aw ay by the current. The divers w ere returned to shore but only one of them needed treatment. They w ere taken by ambulance to DDRC Plymouth for assessment. (Coastguard report).

August 2009 09/248

An instructor and a trainee entered the w ater from the shore to conduct training drills. They sw am out to a depth of 6m and completed a mask clearing exercise. They then moved to alternative air source training; the instructor gave air to the trainee and they ascended to the surface. At the surface the trainee started coughing and her sputum w as seen to be blood stained. The instructor dropped the trainee's w eightbelt and towed her to the shore. She w as placed on oxy gen and the emergency services w ere alerted. She w as taken to hospital where a pulmonary oedema w as diagnosed. It w as subsequently found that the trainee w as taking medication for high blood pressure, w hich she had not declared prior to this event.

August 2009 09/227

Shetland Coastguard received a call from a dive boat reporting that they had a diver onboard w ho had taken in w ater and required immediate lifesaving assistance. The boat was only just outside the harbour so Lerw ick AWLB was tasked to recover the diver from the boat and transfer ashore. The lifeboat w as met by Lerwick Coastguard rescue team and an ambulance which transferred the diver to hospital for treatment. (Coastguard & RNLI reports).

August 2009 09/284

Prior to a dive a diver felt a littl e seasick after a heavy lunch. He conducted a 36 min dive to a maximum depth of 19m w ith a 1 min stop at 9m and a 3 min stop at 6m. On surfacing he reported that he had to exhale violently at 4m and that he felt that he couldn't take a full breath. Once back on shore diving medical advice was sought and the diver attended a hospital for examination. He w as given a chest x-ray which showed no lung problems but it did indicate a large amount of air in his stomach. It w as concluded that this ai r prevented his diaphragm from functioning correctly and w as due to him sw allowing air during the dive.

August 2009 09/251

A diver was walking along an aluminium gangplank betw een a dive boat and the shore, in full kit, at the end of a day 's diving. His left foot slipped and he fell onto his right knee w ith his leg folded under him. Initially he thought that he had dislocated his knee but, w ith assistance from others, he was able to straighten his leg, relieving much of the pain. Once he had removed his drysuit it could be seen that his kneecap was displaced. He was taken by ambulance to hospital w here it w as found that he needed surgery to treat a snapped patella tendon.

August 2009 09/366

Solent Coastguard received a 'Pan Pan' urgency call from a dive boat who had a diver onboard w ho had made a rapid ascent and was suffering from a bleeding nose. Medical advice from Poole hyperbaric chamber w as that given the dive profile and circumstances, the diver did not need to be taken to the chamber, but should go to hospital for assessment. New haven AWLB w as tasked to transfer the diver from the boat back to shore where he was met by an ambulance for assessment. It was ascertained that the injury was not related to the dive so he was treated at the dock and did not need to go to hospital. (Coastguard & RNLI reports).

August 2009 09/367

Shetland Coastguard received a call from a dive boat reporting that they had a y oung diver onboard w ho w as complaining of pains in his shoulders follow ing a normal ascent from a deep dive, it transpired he had also received a bang to the head prior to descending. The boat was met by Stromness CRT and an ambulance where the diver was assessed and did not need to go to hospital. (Coastguard report).

August 2009 09/369

Falmouth Coastguard received a call from a dive boat on the Isles of Scilly reporting they had a diver who was feeling sick and had red lips. It w as thought his sy mptoms could have been due to carbon monoxide poisoning from bad air rather than DCI. The diver was assessed by a paramedic w ho advised transfer to the hyperbaric chamber. The diver w as airlifted to the HLS at Plymouth Hoe by rescue helicopter R-193 where he was met by Plymouth CRT and an ambulance for transport to the hyperbaric chamber at DDRC. (Coastguard report).

August 2009 09/307

Two divers entered the water from a boat and dived to a depth of 6m. 5 min into the dive, one of the pair, a trainee, failed to return an 'OK' signal. She pointed to her regulator second stage and signalled 'Up'. They started to ascend and at 3m the dive leader noticed that the trainee w as breathing heavily ; he brought her to the surface using a controlled buoy ant lift. At the surface he inflated her BCD and removed her mouthpiece and then called the boat for assistance. The trainee then passed out, her weightbelt and diving set w ere removed and she was lifted into the boat. Once in the boat her hood and neck seal were removed and she regained consciousness. She w as taken to the shore and the emergency servic es w ere alerted. She w as placed on oxy gen and diving medical advice w as sought. She made a full recovery.

August 2009 09/372

Humber Coastguard received a 999 call from a dive boat reporting that they had a diver onboard who had made a rapid ascent from 8m and w as feeling unw ell, although not show ing any signs or sy mptoms of DCI and he w as placed on oxygen by the boat. Medical advice from the Institute of Naval Medicine (INM) w as that he should remain on oxygen for at least 6 hours and be taken immediately to hos pital for monitoring of his condition. Rescue helicopter R-131 airlifted to diver to Wansbeck hospital A&E and New biggin CRT assisted at the HLS, (Coastguard report).

August 2009 09/264

An instructor and tw o trainees dived to 17m to conduct some basic training drills. They made a slow descent as one of the

trainees had problems clearing his ears. While practising mask clearing, in a depth of 14m, this trainee started to cough and made a rapid ascent to the surface before the instructor could stop him. The instructor and the other trainee made a normal ascent but missed out the planned safety stop. Their dive duration was 10 min. At the surface the trainee seemed happy to continue the dive so they returned to 6m and dived for a further 15 min. After a surface interval of 1 hour 20 min they dived again, this time to a maximum depth of 15m for a duration of 25 min. The following day the diver who had made the rapid ascent felt unwell, weak and he had a tingling sensation in both arms; he sought diving medical advice. He attended a recompression chamber and received a session of recompression treatment; this treatment did not resolve his symptoms and a viral infection was finally diagnosed.

September 2009 09/376

Falmouth Coastguard received a call from the ambulance service reporting they had received a call reporting a diver on the beach who had ingested water. Porthoustock CRT attended to provide assistance. It transpired that the individual was doing a try dive and had panicked at about 2m and come to the surface. (Coastguard report).

September 2009 09/289

An instructor and two trainees descended to a target depth of 20m. At 16m one of the trainees began to panic and he put air into his BCD and made a rapid ascent to the surface. The instructor and the other trainee followed. At the surface the panicked trainee calmed down and they re-descended to 13m to continue the dive. They surfaced after 17 min with a 3 min safety stop at 6m. The following day the trainee awoke feeling extremely tired and he sought medical advice; he had nasal congestion and a slight pain in his left ear. Two days later he noticed a few painful bubble-like swellings in his abdomen and right armpit. Again diving medical advice was sought and a skin irritation was diagnosed.

September 2009 09/395

Portland Coastguard received a 'Pan Pan' urgency call from a dive RHIB reporting they had a diver who was feeling unwell following his dive. The boat was already ashore, and as soon as the call was made to the Coastguard a doctor arrived to assessed the diver. The doctor quickly assessed the illness was not dive related, so no further assistance was required from the Coastguard. (Coastguard report).

Boating & Surface Incidents

October 2008 09/399
Lifeboat assisted stranded dive boat. (RNLI report).

October 2008 09/400
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

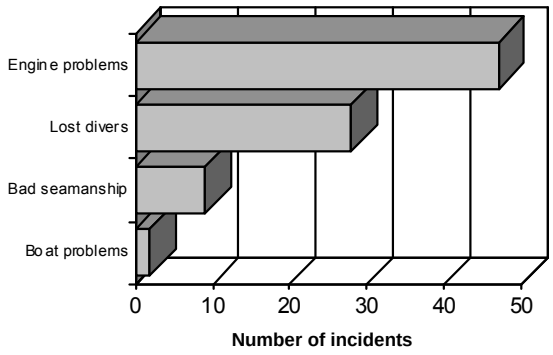
October 2008 09/325
Yarmouth Coastguard was alerted to a broken down dive support vessel. They tasked Lowestoft AWLB to tow the vessel to shore and Southwold ILB assisted. (Coastguard report).

October 2008 09/401
Lifeboat assisted stranded dive boat. (RNLI report).

December 2008 09/326
Broken down dive support vessel. (Coastguard report).

January 2009 09/403
Two lifeboats launched to assist dive boat with engine problems. (RNLI report).

Analysis of boating & surface incidents



February 2009 09/404
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

February 2009 09/050
A pair of divers conducted a dive to a maximum depth of 14m. When one of the pair surfaced he deployed an orange flag but he was not seen by his boat. When it was realised that he was overdue the Coastguard was alerted and a search involving a helicopter, two lifeboats, a warship and police units was started. He was found by one of the lifeboats, 2 hours after the start of his dive, 2.4 miles from his last known position. The diver experienced no subsequent ill effects. (Coastguard & RNLI reports).

March 2009 09/082
The Coastguard was alerted when an RHIB engine broke down with a diver in the water conducting a drift dive. Other nearby vessels attended to help. The diver surfaced shortly afterwards and was able to swim back to his boat. The engine was restarted and the boat was escorted back to shore. (Coastguard & RNLI reports).

March 2009 09/327
Humber Coastguard received a report of a dive boat which had gone aground as they made their way to the dive site. Due to weather conditions the group had already decided to cancel their dive, but as they returned a swell put their boat ashore on rocks. Redcar Coastguard kept watch as Redcar ILB went to their assistance. The group managed to free the boat from the rocks and they were escorted ashore by Redcar ILB. (Coastguard & RNLI reports).

April 2009 09/328
Brixham Coastguard took a hazardous incident report from a dive boat who encountered a yacht making way through the middle of their divers, and refusing to divert their course, despite the dive boat displaying the flag alpha to indicate that there were divers below and the divers carrying SMBs. It was necessary for the dive boat to make physical contact with the yacht in order to avoid the yacht hitting the divers in the water. (Coastguard report).

April 2009 09/320
Two divers conducted a shore dive in a shallow bay. In an attempt to find more depth they inadvertently ventured outside the shelter of the bay. They were caught in a strong current that carried them out of the bay and along the coast. They surfaced and tried to swim back into the bay but couldn't. They fastened themselves together to prevent separation and signalled walkers on nearby cliffs. The walkers called the Coastguard and a helicopter and lifeboat were tasked to assist. The divers were safely recovered after about 20 min on the surface. (Linked to 09/319)

April 2009 09/319
An instructor and two trainees conducted a shore dive to practise the use of alternative air sources. Following one of their ascents they were caught in a strong current that carried them out of the bay and along the coast. They tried to swim back into the bay but couldn't. They descended to the seabed and tried to pull themselves along the rocky bottom but they soon tired and ran low on air so they re-ascended. They held on to each other and signalled walkers on nearby cliffs. The walkers called the Coastguard and a helicopter and lifeboat were tasked to assist. The divers were safely recovered after about 20 min on the surface. The lifeboat crew commented that the divers were easily spotted because of the SMB that they were using. (Linked to 09/320)

April 2009 09/102
Brixham Coastguard received a 999 call reporting divers in difficulty in the water. Plymouth ILB was launched to their

assistance, and found they had been shore diving and were suffering from exhaustion as they were trying to swim against the tide. They were recovered by the ILB and returned ashore where they quickly recovered. (Coastguard & RNLI reports).

April 2009 09/406
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

April 2009 09/407
Lifeboat launched to assist dive boat with fouled propeller. (RNLI report).

April 2009 09/332
Stornoway Coastguard received a call from a dive boat which had engine problems, but with no divers in the water. Stornoway inshore lifeboat was launched to provide a tow back to harbour. (Coastguard & RNLI reports).

April 2009 09/408
Lifeboat launched to assist dive boat. (RNLI report).

May 2009 09/409
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

May 2009 09/119
The Coastguard was alerted when a diver was separated from her group by strong currents. A lifeboat was launched to assist but the diver was found by her dive party 15 min after their alarm call. Three other divers in the party had made rapid ascents and were assessed by a doctor.

May 2009 09/123
Portland Coastguard received a call from a dive boat with engine failure. Two yachts stood by until another dive boat arrived to take them under tow. The tow was then transferred to Weymouth inshore lifeboat who towed the boat back to harbour, to be met by Portland Bill Coastguard team. (Coastguard & RNLI reports).

May 2009 09/198
A group of three RHIBs were operating together with a number of divers in the water. While one of the boats was recovering one pair of divers a large yacht sailed in between the RHIBs and straight over the top of the delayed SMB of another pair of divers. The yacht did not respond to signals from the RHIBs and did not alter course. The divers surfaced safely. All boats were flying flag Alpha.

May 2009 09/410
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

May 2009 09/335
Forth Coastguard received a 999 telephone call reporting a party of divers in difficulties while trying to make their way back to shore, with one reported as missing. Eyemouth AWLB, Coastguard and sector manager and rescue helicopter R-131 were tasked to investigate. Eyemouth AWLB located three divers and Eyemouth Coastguard located a further two divers. All divers were accounted for and no medical assistance was required. The group had no shore cover. (Coastguard & RNLI reports).

May 2009 09/125
Portland Coastguard received a call from a dive boat reporting that they had engine failure. Another dive boat responded to a broadcast for assistance and took them in tow back to harbour where they were met by Portland Bill Coastguard. It transpired that the boat had run out of fuel. (Coastguard report).

May 2009 09/131
A dive boat was returning from a dive when the fuel ran out. The cox switched to an alternative fuel supply and primed the fuel line. However the engine would not restart and the battery was flattened by repeated attempts to start the engine. The boat was anchored and the Coastguard was alerted. A lifeboat attended and towed the boat back to shore.

May 2009 09/336
Milford Haven Coastguard received a mobile telephone call from a dive boat reporting that they had a diver overdue. While more details were being gathered, the diver surfaced safe and well and no further assistance was required. (Coastguard report).

May 2009 09/413
Lifeboat launched to assist dive boat. Persons landed. (RNLI report).

May 2009 09/244
The Coastguard was alerted when a diver failed to surface as expected. A search was being initiated when the boat called the Coastguard again to say that the diver had surfaced safe and well. (Media report).

May 2009 09/339
Liverpool Coastguard received a call from a boat that had come across a group of three divers who informed him that a fourth member of their group was missing. However, while the boat was on the phone to the Coastguard, the fourth diver surfaced. The group was met by Peel Coastguard on their return to shore. (Coastguard report).

May 2009 09/340
Humber Coastguard received a call to report that a fishing vessel had a dive boat under tow after they had broken down, all divers were safe and well. (Coastguard report).

May 2009 09/415
Lifeboat launched to assist dive boat with fire. (RNLI report).

May 2009 09/416
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

June 2009 09/417
Lifeboat launched to assist dive boat. False alarm. (RNLI report).

June 2009 09/153
A dive boat had just recovered its last divers when a DSC distress alert sounded on their VHF radio. The cox listened to the radio traffic and heard a 'May day' call from a vessel adrift which was about to hit rocks. The cox realised that this was from a small fishing boat in their immediate vicinity. They moved towards the distressed boat and alerted the Coastguard

to their presence. They took the boat in tow and brought it away from danger and towards the harbour. A lifeboat arrived and took over the tow.

June 2009 09/420
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

June 2009 09/418
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

June 2009 09/169
Forth Coastguard received a 999 call reporting two divers in difficulty on the surface. Eymouth CRT and AWLB were tasked to investigate. The divers were recovered by the AWLB and returned to shore without the need for medical attention. It transpired that they had dived a bit further out than intended and were carried away by a strong current. (Coastguard & RNLI reports).

June 2009 09/421
Lifeboat launched to assist dive boat which was dragging its anchor. (RNLI report).

June 2009 09/345
Brixham Coastguard received a retrospective report from a dive boat of a near miss when another boat ran over his divers while they were diving on a wreck. The dive boat had permission from the local harbour authority to dive on the wreck and was displaying all the correct signs. Several attempts at the time to contact the boat by VHF Ch 16 were unsuccessful, although the boat was later traced. The dive boat was advised that it is better to make the report at the time the incident happened, not later. (Coastguard report).

June 2009 09/422
Lifeboat launched to assist dive boat that was out of fuel. (RNLI report).

June 2009 09/189
An instructor and two trainees entered the water for a dive but did not make the shotline as planned due to a current. They descended to a reef but one of the trainees had problems clearing her ears and they surfaced. The sun was low in the sky and glare on the water prevented those in the boat from seeing them. The current carried them away from the boat. 45 min later it became clear that they were overdue from their dive and the Coastguard was alerted. A search was initiated involving a lifeboat and another vessel. The divers were able to make their way to the shore and were recovered by a shore based Coastguard team after the search had been underway for 90 min.

June 2009 09/423
Two lifeboats launched to assist dive boat with engine problems. (RNLI report).

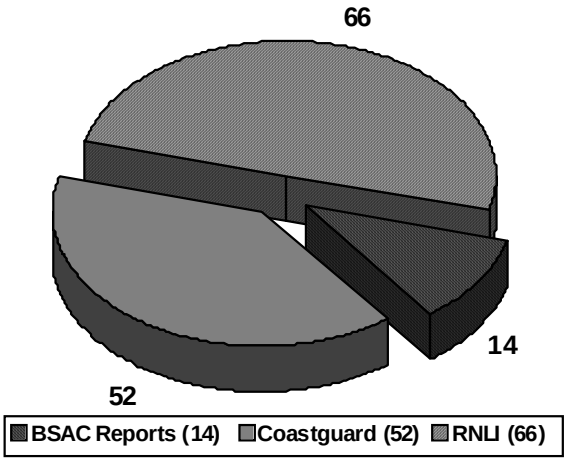
June 2009 09/424
Lifeboat assisted in the search for missing diver(s). (RNLI report).

June 2009 09/205
Three divers entered the water from the shore and commenced their dive. There was a current flowing and one of the three had a problem with his fins. While trying to fix the problem he became separated from the other two. The two divers surfaced then dived again to try to locate the missing diver. They surfaced again and a delayed SMB appeared close to them. They pulled on this SMB and another pair of divers from the same dive group surfaced. A current carried the four divers away from their exit point. A passing boat offered help and the Coastguard was alerted when the missing diver was not found. A lifeboat and several other craft conducted a search for the missing diver who was eventually found on a beach; he had finished the planned dive after being unable to relocate his two buddies.

June 2009 09/425
Lifeboat launched to assist dive boat with fouled propeller. (RNLI report).

June 2009 09/190
Two divers and two non-divers took an RHIB to sea to test it out after a recent service. The divers proposed to conduct a possible drift dive. They decided not to dive because the area of their proposed dive was temporarily out of bounds. They decided to fish instead. When they tried to recover the anchor they found that it was stuck and one of the divers dived down to free it; the depth was about 10m. This diver then surfaced and was carried away from the boat by a current; the anchor was still in place. The diver was in some distress so the other diver kitted up and entered the water to help her. As he did so he told the others in the boat to cut the anchor line and to come and pick them up. Eventually the two in the boat succeeded in cutting the line but the engine stalled and they were unable to re-start it. At this point the two in the boat contacted the Coastguard and a helicopter and two lifeboats were tasked to assist. A nearby range tender also came to assist and recovered the divers from the water. They were returned to their boat, the engine was restarted and they returned to the shore.

Boating & surface incident report source analysis



July 2009 09/427
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

July 2009 09/317

The engine of a dive boat failed w ith two divers in the water conducting a drift dive. The cox attempted to use an aux iliary engine but this too failed. The cox alerted the Coastguard and a lifeboat was tasked to assist. Tw o other craft that were in the area came to assist. The divers w ere recovered and the boat was towed to safety by the lifeboat. It w as later found that silicone fragments had blocked the fuel line of the main engine and that the spare had been flooded by over-choking.

July 2009 09/429

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

July 2009 09/347

Milford Haven Coastguard received a telephone call from a dive boat reporting that they had engine failure. The boat was towed to a safe anchorage by Little Haven ILB and the crew transferred ashore. They did not have any divers in the water when they broke down. (Coastguard & RNLI reports).

July 2009 09/348

Portland Coastguard received information from a local support boat that a dive boat had reported to them that they had a solo diver who was over 1 hour overdue. Coastguard helicopter CG-104, Wey mouth AWLB & ILB, three local w ork boats, a warship and Coastguard teams from Wy ke and Lulw orth w ere all tasked to commence a search. The diver w as located some 3 hours after going missing, having drifted some w ay from the dive site. (Coastguard & RNLI reports).

July 2009 09/430

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

July 2009 09/349

Portland Coastguard received a 999 call from a sailing club boat reporting that they had lost contact w ith tw o divers and were unable to see their bubbles , and the battery on their VHF radio had died. Contact w as made w ith Sw anage National Coastwatch Institution lookout as they were able to oversee the area, and they reported that they could see the boat having regained contact w ith the divers, although they w ere some distance aw ay from the boat. Swanage Coastguard rescue team were sent to meet the boat on its return. It transpired that the divers had drifted aw ay from the boat when they descended and they had not been carrying an SMB. (Coastguard report).

July 2009 09/213

A 999 call w as received reporting tw o divers on the surface being carried aw ay by the tide and w aving for assistance. Trearddur Bay lifeboat rescued these divers and discovered two more w ho had climbed onto rocks and a further two who were sw imming ashore, all from the same diving club. Holyhead Coastguard Team assisted the divers who had made the shore. (Coastguard & RNLI reports).

July 2009 09/192

A dive boat contacted the Coast guard when an electrical failure prevented the engine from being started. Another vessel assisted and towed them ashore. A battery terminal w as found to be loose; the engine had been serviced the day before. (Coastguard report).

July 2009 09/193

A group of divers w ere preparing to enter the water from a hardboat when it started taking on w ater. The Coastguard w as alerted and attempts w ere made to use bilge pumps but the boat continued to sink. The boat sank by the stern and one person was almost trapped in the cabin as he attempted to get to lifejackets. He w as in a dry suit and its buoy ancy made it difficult for him to get dow n to the door and out into the water. The boat remained for a while with its bows just out of the water and divers swam down to cut the inflatable life raft free from the cabin roof. A passing y acht recovered tw o of the people and the others waited in the life raft to be rescued by a lifeboat. It is thought that the boat suffered a major seal failure below its waterline.

July 2009 09/350

Brixham Coastguard received a ca ll from a dive boat reporting they had engine failure, w ere drifting, and still had divers in the water. Teignmouth ILB was launched to their assistance. A local boat responded to the broadcast for assistance and stood by until arrival of the ILB. The remaining divers were recovered and the boat w as able to get their engine running again. They were escorted back to port by the ILB w here they were met by Teignmouth CRT. (Coastguard & RNLI reports).

July 2009 09/351

Portland Coastguard received a second 'Pan Pan' urgency call in two day s from a dive boat w ho this time had got a fouled propeller and w as near to rocks. Despite two local boats responding to the broadcast for assistance, Wey mouth AWLB and ILB were also tasked as the boat still had divers in the water. The tw o local boats assisted the lifeboats on scene while the remaining divers w ere recovered. The boat w as eventually able to clear the propeller and return to harbour under her own steam. (Coastguard & RNLI reports).

July 2009 09/353

Brixham Coastguard received a call from a group of shore divers reporting that one of their group had surfaced having lost contact with his buddy , in poor visibility , and they could not see his SMB. Torbay ILB and Berry Head CRT w ere sent to assist in the search for the diver. How ever, as the units were proceeding, the group reported that the diver had surfaced safe and well. (Coastguard & RNLI reports).

July 2009 09/431

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

July 2009 09/245

Three pairs of divers w ere dropped into the w ater to dive an underwater reef with a maximum depth of 45m. The dives started at slack water. Tw o pairs intended to deploy delay ed SMBs at the end of their dives and the third pair dived w ith an SMB. Having dropped the third pair into the w ater and monitored their descent the boat handler moved back to w here the first two pairs were, but she could see no sign of them. She moved back to track the divers w ith the SMB but was unable to locate their buoy . The current began to pick up after slack water and it became apparent that the first divers to enter the water should have surfaced but no sign could be seen of their delayed SMB. The boat handler called the Coastguard for assistance. A nearby lifeboat came to assist and a number of other vessels in the area kept a look out. A second lifeboat was tasked to assist and all divers w ere safely located and recovered within 20 min of the call to the Coastguard.

July 2009 09/356
Brixham Coastguard received a call from a harbour patrol boat reporting a dive boat w ith six divers onboard which had engine problems. The boat w as escorted back to shore by the harbour patrol boat. (Coastguard report).

July 2009 09/358
Portland Coastguard received a call from a dive boat reporting that they had suffered engine failure and still had eight divers in the water. Rescue helicopter R-106 and Wey mouth AWLB were tasked to their assistance. The boat was able to regain some power and recover some of her divers, w hile the helicopter stood by monitoring the position of the rest of the divers who were assisted by another dive boat. Wey mouth AWLB took the boat in tow back to port where they were met by Portland Bill Coastguard rescue team. (Coastguard & RNLI reports).

July 2009 09/432
Lifeboat launched to assist dive boat w ith engine problems. (RNLI report).

July 2009 09/433
Lifeboat launched to assist dive boat w ith engine problems. (RNLI report).

August 2009 09/434
Lifeboat assisted stranded dive boat. (RNLI report).

August 2009 09/297
An RHIB had divers in the water and one pair sent a lifting bag to the surface, this bag w as connected to a line which was connected to the seabed. The cox attempted to approach the lifting bag but in a strong w ind the lifting bag lines became tangled around one of the boat's propellers and the cox w as unable to free it. As the divers started to surface the cox contacted the Coastguard for assistance. Tw o lifeboats and a helicopter were launched to assist. The divers w ere recovered by one of the lifeboats. The divers were able to cut the line free and the boat returned safely to harbour.

August 2009 09/359
Falmouth Coastguard received a call from a dive RHIB reporting that they had suffered total pow er failure. Newquay ILB went to their assistance and tow ed them back to harbour. (Coastguard & RNLI reports).

August 2009 09/360
Humber Coastguard received a call from the police that they had received a report regarding a diver w ho had been shore diving and w as considered to be overdue. Sunderland Coastguard rescue team and Ty nemouth AWLB were tasked to commence a search. How ever, a report w as received from the police that the diver had been located on the surface and returned to shore unaided. (Coastguard report).

August 2009 09/436
Lifeboat launched to assist dive boat w ith engine problems. (RNLI report).

August 2009 09/361
Yarmouth Coastguard received a call from a dive boat reporting that they had broken dow n w ith fuel problems en route to the dive site. Happisburgh ILB went to their assistance providing a tow back to harbour. (Coastguard & RNLI reports).

August 2009 09/318
While two divers were preparing to enter the water one of a dive boat's two engines cut out. To reduce the fumes the cox decided not to restart the engine until the divers were in the water. The divers entered the water and as they left the surface the second engine cut out as w ell. The cox w as unable to restart either engine and the boat w as drifting aw ay from the divers. The Coastguard w as alerted and other boats that w ere nearby came to assist. The divers w ere recovered by another boat. The cox managed to get one of the engines started and they were escorted back to harbour. It w as later found that the engine that would not start had a loose electrical connection.

August 2009 09/362
Solent Coastguard received a call from a dive boat reporting they had broken dow n. Littlehampton ILB w ent to their assistance and provided a tow back to harbour. (Coastguard & RNLI reports).

August 2009 09/266
Dover Coastguard received a call from a dive boat reporting that they had a diver w ho w as overdue after he and his buddy had attempted to recover an anchor; the buddy had surfaced when expected. The skipper became concerned when he could no longer locate the missing diver's bubbles on the surface. Ramsgate AWLB & ILB and Coastguard helicopter EN07 w ere tasked to carry out a search for the missing diver, along with the dive boat. The diver w as located by the dive boat shortly after the search commenced. Ramsgate CRT met the boat on return to the harbour to discuss the incident. (Coastguard & RNLI reports).

August 2009 09/250
Two divers conducted a w reck dive in a maximum depth of 33m. On returning to the shotline they became separated and they surfaced separately . One of the pair surfaced up the shotline and w as recovered into the boat; the other deployed a delayed SMB. The SMB was not seen by those in the boat and when this diver surfaced he could not see the boat. The Coastguard was alerted and four lifeboats and a helicopter were tasked to search for the missing diver. He w as found after 20 min by one of the lifeboats. As dusk fell the diver had used a torch to attract attention and this assisted his location.

August 2009 09/267
Brixham Coastguard received a 999 call from a boat reporting that they had a diver who was overdue by 1 hour. A sea search was commenced w ith Salcombe AWLB & ILB, Coastguard rescue helicopter R-106, and a 'Mayday' broadcast requesting assistance was made. Dartmouth and Praw le CRTs w ere also tasked to see if they could spot the diver from the shore. The diver w as found fairly quickly by a y acht w hich had responded to the broadcast. The diver w as transferred to Salcombe AWLB, w hile the ILB made her w ay to the dive boat to report that he had been found, as the boat did not have a VHF radio. (Coastguard & RNLI reports).

August 2009 09/305
The engine of an inflatable dive boat stopped and could not be restarted whilst tw o pairs of divers w ere underw ater. The cox was able to paddle the boat to the nearby shore. He put out a 'Mayday' call but, due to the local geography, this was not heard by the Coastguard. Another vessel that w as close by relayed the call. The local lifeboat w as engaged in another rescue and was unable to help. During this time the divers surfaced,

realised the problem and swam to the shore. Three local boats arrived to help and one of these boats towed the disabled craft back to the launch point.

August 2009 09/437
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

August 2009 09/438
Two lifeboats launched to assist dive boat with engine problems. (RNLI report).

August 2009 09/370
Holyhead Coastguard received a call from a shore contact reporting that they were concerned for a friend who had gone snorkelling on his own to collect sea weed. While the AWLB & ILB from Holyhead and the CRT from Cemaes were being tasked a boat in the area reported that he had seen the person exit the water and walk up the shore, safe and well. Cemaes CRT attended to confirm the snorkeller was okay. (Coastguard report).

August 2009 09/263
Three divers were ascending a shot line after a dive to 27m. At about 9m they found the end of their SMB line with no buoy attached; the knot had come undone. They completed their ascent and, once on the surface, they could see their boat in the distance, following the buoy. They inflated SMBs and held on to the shot buoy. When it was clear that the divers were overdue the boat party alerted the Coastguard. A helicopter and two lifeboats were tasked to search. The divers were located and recovered after 1 hour 20 min on the surface.

August 2009 09/440
Two lifeboat launched to search for missing diver(s). (RNLI report).

September 2009 09/379
Humber Coastguard received a 999 call from someone on shore reporting that they could see someone who seemed to be looking for a diver in the water. Blyth CRT and ILB were tasked to proceed to carry out a search, but before they could get going the first informant called back to report that the diver had surfaced. (Coastguard report).

September 2009 09/381
Swansea Coastguard received a call from a dive boat reporting that they had engine failure and still had two divers in the water that they were unable to recover, although they were carrying an SMB. Rescue helicopter R-169, Oxwich CRT & Horton ILB were tasked to search for the divers. A local fishing boat responding to the 'May day' broadcast found the divers fairly quickly, recovered them and returned them to their boat. They were both well and did not require any further assistance. The ILB then towed the dive boat back to shore where they were met by Oxwich CRT. (Coastguard & RNLI reports).

September 2009 09/382
Belfast Coastguard received a 999 call from a person ashore reporting a diver who was overdue returning from a shore dive. Newcastle AWLB and ILB, South Down CRT and rescue helicopter R-116 were tasked to proceed and commence a search for the diver. However, before they arrived on the scene, it was reported that the diver had returned ashore. (Coastguard & RNLI reports).

September 2009 09/384
Milford Haven Coastguard overheard a 'Pan Pan' urgency call from a dive boat reporting that they had a missing diver. An additional 'Pan Pan' urgency broadcast was by made by Milford Haven Coastguard to vessels in the area and Angle AWLB, Littlehaven ILB and rescue helicopter R-122 were sent to the scene to commence searching. However, before they arrived it was reported that the diver had been found safe and well and all search units were stood down. (Coastguard & RNLI reports).

September 2009 09/387
Humber Coastguard received a report from a person ashore of a lone diver who was thought to be overdue. The diver was seen to enter the water from a boat, but over an hour later he had not been observed to return. Seahouses CRT and AWLB & ILB were sent to the scene to investigate and carry out a search. However, as the units were proceeding it was reported that the diver had returned ashore and was safe and well. (Coastguard report).

September 2009 09/388
Milford Haven Coastguard received a 999 call from a dive boat reporting that they had broken down, but had all divers onboard. Tenby AWLB was tasked to proceed and assist with a tow and they were met by Tenby CRT on return to port. (Coastguard report).

September 2009 09/441
Lifeboat launched to assist dive boat with engine problems. (RNLI report).

September 2009 09/299
Three divers were thrown into the water when their dive boat capsized in rough water. A lifeboat and a helicopter were tasked to assist. Two local fishing boats also came to help and with their assistance the divers were able to right their boat and recover much of their lost equipment. The divers were taken aboard the lifeboat and brought ashore. (Media report).

September 2009 09/390
Milford Haven Coastguard received a 'Pan Pan' urgency call which was relayed to them by another boat. A dive boat had reported that they were out of fuel and had two divers who had been missing for approximately 1 hour 30 min. The boat relaying the message found the divers on rocks safe and well, and they did not need medical attention. The broken down boat was placed on a mooring to fix her problem and then made her own way back to port. (Coastguard report).

September 2009 09/308
A dive boat was returning from a dive when it struck a submerged rock. The skeg and propeller were damaged and a secondary engine was used to get the boat back to the slipway.

September 2009 09/392
Humber Coastguard received a VHF radio call from a dive boat reporting that they had one diver from a buddy pair missing when they surfaced. Berwick AWLB, ILB, CRT and a rescue helicopter were tasked to commence a search, but before they were able to proceed it was reported that the diver had been located. The diver had made a normal ascent and was well and required no medical assistance (Coastguard & RNLI reports).

September 2009 09/301

A pair of divers conducted a w reck dive to a maximum depth of 53m. When they surfaced they were separated from each other for about 10 min and their boat w as not in sight. The Coastguard was alerted when the two divers failed to surface as expected. Four lifeboats and a helicopter w ere tasked to search. After about 3 hours and 30 min the divers were found safe and well, about 9 miles from their entry point, as darkness fell. Their location w as aided by the divers' use of fluorescent hoods, flags, strobe lights and torches.

Ascents

October 2008 09/012

Three divers dived to a maximum depth of 20m. One of the divers experienced problems with his air supply and noticed that his pressure gauge w as fluctuating as he breathed. He indicated to one of his buddies to check that his air w as turned on correctly but the buddy turned the air supply off by mistake; it had only been on less than one turn. The diver w ho was now without air made a rapid ascent to the surface. At the surface he struggled to stay afloat even w ith his buddies' help. A boat went to their assistance and they w ere recovered from the water. The troubled diver was placed on oxygen for a while and quickly recovered.

October 2008 09/067

A diver conducted tw o dives to depths greater than 30m. On the second dive he made a rapid ascent from 20m. The Coastguard was alerted and the diver was taken by lifeboat to a recompression facility. T he diver showed no sy mptoms of DCI and he was transferred to hospital for oxy gen treatment and overnight observation. (Coastguard & RNLI reports).

October 2008 09/015

Two divers conducted a dive to a planned maximum depth of 20m. However, without them realising it, they descended to a depth of 28m. They tried to move into shallower water and then became low on air. They ascended directly to the surface missing a planned 3 min safety stop at 6m. They suffered no subsequent ill effects.

October 2008 09/070

The Coastguard w as alerted after a diver made a rapid ascent from a dive to 36m. The diver w as transferred to a recompression facility but he had no sy mptoms of DCI and he was not recompressed. (Coastguard report).

November 2008 09/019

Two divers conducted a dive to a maximum depth of 21m. At 18m one of the pair started to panic, he ditched his w eightbelt and made a faster than normal ascent to the surface. No subsequent ill effects were reported.

November 2008 09/025

Three divers descended to a maximum depth of 25m on a night dive. After about 20 min they started to sw im back to the start point in single file. During this sw im the third diver became distressed and the second diver turned to help him. While this was happening the pair unknow ingly floated tow ards the surface. At about 6m the second diver realised w hat w as happening and, letting go of the troubled diver, he dumped air from his BCD. The second diver sank back to the bottom at 25m and the troubled diver w as carried buoyantly to the surface. The second diver looked around for his other buddy but he could not see him. He w as just preparing to move off when the troubled diver sank back beside him still in apparent distress. The second diver calmed the troubled diver and they started a return sw im. They followed the bottom upwards to a depth of 18m and then made their ascent. The second diver made a 3 min safety stop at 6m, but w hile he w as checking his computer the troubled diver left him and w ent straight to the surface. All three divers left the water safely. No subsequent ill effects were reported.

November 2008 09/052

The Coastguard was alerted after a diver made a rapid ascent, missing stops. She w as taken to hospital for treatment. (Coastguard report).

December 2008 09/057

Two divers ran out of air and made an ascent from a 40m dive missing decompression stops. The Coastguard was alerted and the divers w ere taken to hospital where they were held for observation. (Coastguard report).

December 2008 09/058

A diver made a rapid ascent from a dive to a maximum depth of 35m, missing 17 min of decompre ssion stops. The Coastguard was alerted and the diver w as transferred to a recompression facility by lifeboat. He show ed no signs of DCI and w as transferred to hospital for overni ght observation. (Coastguard & RNLI reports).

January 2009 09/447

The casualty made an inverted rapid ascent to the surface from a depth of 22m. He was monitored for DCI symptoms.

January 2009 09/030

Two divers conducted a training dive in a lake. A very strong wind w as blow ing and this caused w ater currents in the lake. They descended a shotline and began their dive. About 7 min into the dive the instructor felt that the conditions w ere too difficult for the trainee and he signa lled to him that they should return. During the return sw im the instructor lost sight of the trainee in a depth of about 10m; he looked around for him and then surfaced. The trainee also surfaced and gave a distress signal. Other divers sw am from the shore to assist them. All divers safely left the w ater. The trainee w as placed on oxy gen and no subsequent ill effects w ere ex perienced. The trainee later reported that he had been following the instructor against a strong current. He had started to become buoy ant and w as unable to dump air quickly enough to prevent his ascent.

January 2009 09/035

Two divers conducted a dive to a maximum depth of 16m. 28 min into the dive one of the pair developed cramp in one of his legs; he stopped to try to ease the problem and he became separated from his buddy . After about 1 min he made a rapid ascent to the surface. At the surface he w as unable find his BCD inflator and he struggled to stay afloat. He started to become exhausted and released his w eightbelt. Others assisted him from the w ater. Once ashore he was exhausted and felt very unw ell. A doctor examined the diver and the Coastguard was alerted. The diver w as placed on oxy gen and then airlifted to a recompression facility . No sy mptoms of DCI were detected and he spent 4 hours in hospital on oxygen before being released.

February 2009 09/046

A diver surfaced from a maximum depth of 29m missing decompression stops. The Coastguard was alerted and the diver w as air lifted to a r ecompression facility . She was not recompressed but admitted to hospital for overnight observation.

February 2009 09/090

Two divers conducted a w reck dive to a maximum depth of 30m. One of the pair w as using borrow ed equipment and she did not carry sufficient weight. She had to pull herself down the shotline and had difficulty stay ing on the wreck. The underwater visibility was poor and there w as a current. The diver w ith borrow ed equipment struggled to control her buoyancy and they decided to abort the dive. They made their way back to the shotline w ith the buoyant diver holding onto the wreck all the w ay. Once at the shotline she made a rapid ascent to the surface. Her buddy surfaced and found her face down at the surface. He signalled the boat and she w as recovered from the water. Their dive duration w as 38 min. The Coastguard w as alerted and the diver w as airlifted to a recompression chamber. She w as not recompressed but was held overnight in hospital for observation.

February 2009 09/047

Two divers suffered a rapid ascent follow ing a dive to 41m, but had no signs or symptoms of DCI. A doctor onboard the dive boat was able to administer oxy gen w hile medical advice w as obtained from Aberdeen hyperbaric unit. As the divers were not showing any signs of DCI they were evacuated from the dive boat by North Berwick AWLB & ILB and taken by ambulance to hospital at Edinburgh Roy al Infirmary for assessment. (Coastguard & RNLI reports).

February 2009 09/449

At a depth of 14m the casualty had a regulator free flow , so he took his buddy's alternative air source. They both made a rapid ascent to the surface. The casualty complained of DCI symptoms so first aid and oxy gen w ere administered and the symptoms disappeared. He w as monitored for more sy mptoms then went home.

March 2009 09/091

A 45 year old male diver w as assessed for sy mptoms of DCI at Millport hy perbaric unit then transferred to hospital for observation. The diver had made a rapid ascent from 27m due to an equipment failure w hile ascending from a 44m dive. (Coastguard report).

March 2009 09/086

A pair of divers conducted a dive to a maximum depth of 44m. After about 12 min they began an ascent up a sandy slope. At 27m their decompression requirements had reduced to 1 min at 6m. At this point one of the pair felt that he w as beginning to become buoyant. He attempted to dump air from his BCD and checked that his suit's auto dump valve w as fully open. When he pulled on the shoulder dump of his BCD the cord came away in his hand. He began to make a buoy ant ascent. His buddy attempted to grab him but missed. The buoy ant diver w as carried rapidly to the surface. His total dive duration w as 27 min. He w as recovered into the boat and placed on oxy gen. His computer show ed a fast ascent. The buddy made a safe ascent. The Coastguard w as alerted as a precaution and the diver w as advised to attend a recompression facility for a check-up. He was found to have a mild skin rash and w as sent to hospital w here he w as placed on ox ygen. No subsequent ill effects were experienced. The diver had been using a different cylinder configuration from normal and it was suggested that his weighting may have been incorrect.

March 2009 09/093

A diver w ho surfaced in difficulty was airlifted to hospital by RN rescue helicopter R177 follow ing a rapid ascent from 31m. Largs inshore lifeboat w as launched and another vessel proceeded to assist in recovering the dive boat's other ten divers who were still in the water. (Coastguard & RNLI reports).

April 2009 09/099

MRCC Falmouth received a VHF call from a dive boat requesting medical advice for a diver w ho had made a rapid ascent from a 25m dive. The dive manager w as connected with the duty doctor at the DDRC w ho advised that the casualty should be observed for an hour on s hore. As the dive boat still had divers in the w ater Falmouth RNLI inshore lifeboat w as launched to assist. (Coastguard & RNLI reports).

April 2009 09/174

A diver and an instructor conducted a dive to a maximum depth of 19m. During the dive the less experienced diver practised the use of an SMB. On tw o occasions the less experienced diver lost control of her buoy ancy and started to rise before dumping air and re-descending. 13 mi n into the dive she put air into her suit again and w as unable to stop a buoy ant ascent to the surface. The instructor made a fast ascent to 10m and then made a normal ascent to the surface w ith a 1 min stop at 6m. At the surface the diver w ho had made the buoyant ascent failed to respond to signals from the shore as she w as concentrating on reeling in the SMB line. Once the instructor surfaced the two re-grouped and made their w ay ashore. Neither diver suffered any subsequent ill effect. It is thought that the diver was focused on controlling the SMB line and thus distracted from keeping good control of her buoyancy.

April 2009 09/133

Two divers conducted a 42 min dive to a depth of 30m including a 3 min stop at 3m. 2 hours 7 min later they dived to 30m. About 38 min into this dive, at a depth of about 11m, one of the pair ran out of air and took the octopus regulator of his buddy. The diver w ho w as out of air attempted to deploy a delayed SMB and they sank back to 16m w hile doing so. They then made a rapid ascent directly to the surface. One of the divers' computers indicated that they had missed 20 min of decompression, the other indicated a missed stop at 6m. They were recovered into the boat and placed on nitrox. Once ashore they sought diving medical advice and they were advised to self monitor for symptoms. No subsequent ill effects were reported.

May 2009 09/121

Three divers conducted a 20 min dive to 30m. Towards the end of the dive one of the three deployed a delayed SMB. He filled the buoy using his octopus regulator and, as the buoy started to ascend, the line caught around the regulator. The others tried to assist him and, in the confusion, they all made a rapid ascent to the surface. The Coastguard was alerted and diving medical advice w as sought. None of the divers developed any symptoms of DCI and they were advised to monitor themselves for a period of 48 hours. (Coastguard report).

May 2009 09/454

At a depth of 17m the casualty 's regulator came out of his mouth and he aspirated w ater w hen he replaced and purged the regulator. He spat the regulator out and swam rapidly to the surface. His instructor slow ed the ascent and assisted him out of the water. He w as monitored for DCI and oxy gen w as administered.

May 2009 09/142

Holyhead Coastguard received a call from a dive boat reporting they were returning to harbour with two divers onboard who had suffered a rapid ascent. They were not displaying any signs or symptoms of DCI, and had been placed on oxy gen as a

precaution. The divers were landed ashore to be met by Abersoch CRT and an ambulance before being transferred to rescue helicopter R-122 to be taken to the hyperbaric chamber at Thingwall. (Coastguard report).

May 2009 09/143

Brixham Coastguard received a call from a dive boat with a diver onboard who had made a rapid ascent from 16m. The diver was not showing any signs or symptoms of DCI, and was placed on oxygen as a precaution. The dive boat was put in a medical connect call with a dive doctor at DDRC Plymouth, who recommended that the diver be kept on oxygen and given fluids and to call back to DDRC in an hour's time with an update on the diver's condition. The diver did not subsequently suffer from any DCI symptoms, so he was allowed to return home. Bigbury CRT and Bantham Beach LG met the boat on return to the beach. (Coastguard report).

May 2009 09/144

Shetland Coastguard received a call from a dive boat reporting that they were returning to port with a diver onboard who had made a rapid ascent and missed stops. The boat was met by an ambulance on arrival and the diver was taken to Balfour hyperbaric chamber for treatment. (Coastguard report).

May 2009 09/139

A pair of divers conducted a dive to a maximum depth of 29m. Part way into the dive one of the pair realised that he had forgotten to fit his ankle weights. He deployed a delayed SMB and tried to alert his buddy to the situation. He began an ascent from 25m, lost control at about 12m and made a rapid ascent to the surface. His dive duration was 28 min. The Coastguard was alerted and the diver was airlifted to a recompression facility for treatment. (Coastguard report).

June 2009 09/147

A diver was recompressed at the Aberdeen Royal Infirmary. He had made a rapid ascent during a 26m dive. (Coastguard report).

June 2009 09/148

Shetland Coastguard received a call about a diver on a dive boat who had made a rapid ascent and had missed stops, but was not showing any signs or symptoms of DCI. Stromness ALB was tasked to transfer the diver, and his buddy as a precaution, from the dive boat. The divers were taken to shore to be met by Stromness CRT and an ambulance for transfer to Balfour hyperbaric chamber for assessment. They were later released by the doctor to return home and did not require any recompression treatment. (Coastguard & RNLI reports).

June 2009 09/185

A diver who was suffering from symptoms of DCI after making a rapid ascent on a 23m dive was transferred to the recompression chamber in Stromness but was not recompressed. (Coastguard report).

June 2009 09/157

A diver conducted an uneventful dive to a maximum depth of 28m. During his ascent he felt buoyant at 15m, he tried to dump air from his drysuit but was unsuccessful. He opened the suit's neck seal to allow water in to try to reduce his buoyancy but this was ineffectual. He held on to his buddy to try to slow his ascent and then adopted a head down position. His buddy was pulled up to 5m at which point they separated; the buddy descended to 15m from where he made a normal ascent including stops; the buoyant diver made a rapid ascent to the surface missing 3 min of decompression. His dive duration was 37 min. Once out of the water he was found to be symptom-free but he was placed on oxygen and given water to drink. The Coastguard was alerted and diving medical advice was sought. The diver was airlifted to a recompression facility but no treatment was found necessary and he was discharged 2 hours later. The diver was using a new kit configuration and it is thought that he was not correctly weighted.

June 2009 09/160

Two divers were transferred to the recompression facility at Stromness. They had both made a rapid ascent from a 22m dive. (Coastguard report).

June 2009 09/161

Falmouth Coastguard received a request from a dive boat for medical advice for a diver who had suffered a rapid ascent after losing her weightbelt. She was placed on oxygen and was displaying no signs or symptoms of DCI. The boat was placed in a medi-link call with a dive doctor at DDRC Plymouth who advised they should return to port, monitor her condition, and call DDRC later with an update. The boat returned on completion of their diving with the diver suffering no ill effects, so DDRC were happy for her to return home. (Coastguard report).

June 2009 09/178

Two divers dived to a maximum depth of 13m. During the dive, one of the pair lost her weightbelt and made a rapid ascent to the surface from 10m; her buddy went with her. Their dive duration was 12 min. The Coastguard was alerted and diving medical advice was sought. Neither diver was displaying signs of DCI and they were advised to continue to monitor their condition. (Coastguard report).

June 2009 09/460

The casualty was diving with an instructor for the first time in a drysuit. At a depth of 12m the casualty was unable to dump air from her suit and her feet began to float which pulled her up to the surface. The casualty was shaken and did not want to descend so they swam on the surface to shore. The casualty felt unwell that night.

June 2009 09/163

Shetland Coastguard received a call from a dive boat with a diver onboard who had made a rapid ascent and missed 10 min of decompression stops. The diver was showing no signs or symptoms of DCI and the boat still had divers in the water. The diver was placed on 100% oxygen as a precaution. Longhope AWLB was tasked to meet the dive boat and return the diver to shore where she was met by Stromness CRT and transferred to Balfour hyperbaric chamber for assessment. However she did not subsequently require treatment in the chamber. (Coastguard & RNLI reports).

June 2009 09/168

Aberdeen Coastguard received a 'Mayday' call from a dive boat with two divers onboard who had missed 17 min of decompression stops, but were showing no signs or symptoms of DCI. They were put in a medi-link call with the hyperbaric chamber and the advice was to evacuate them as soon as possible. Rescue helicopter R-137 was tasked to airlift the divers to A&E at Aberdeen Royal Infirmary where they were met by a dive doctor for assessment. The dive boat was met by Lossiemouth CRT on return to shore. (Coastguard report).

June 2009 09/182

A trainee and an instructor conducted a dive to a maximum depth of 27m. When the trainee reached 100 bar he deployed a delay ed SMB, as planned, usi ng his octopus regulator, to start their ascent. The trainee allow ed a lot of air to escape around the buoy and released the buoy inadequately inflated. Once deploy ed he started reeling in the line but they were not ascending. The instructor deployed his own delayed SMB. The trainee indicated that he w as dow n to 50 bar. The instructor gave the trainee his alternative air source, the trainee released his SMB and they started their ascent. At 16m their ascent became rapid and they rose quickly to the surface. Once in the boat they w ere placed on oxy gen and the Coastguard was alerted. They w ere taken by helicopter and ambulance to a recompression facility.

June 2009 09/322

An instructor and a trainee entered the w ater to conduct mask clearing and the use of alter native air sources. They descended to 10m and completed the mask clearing. When the trainee w as acting as the recipient of air she inadvertently put the instructor's regulator into her mouth upside-down. She inhaled water and started to panic. The instructor tried to give her her main regulator back but she continued to panic and she swam for the surface. The instructor slowed her ascent and succeeded in getting the regulator back into her mouth, but the rapid ascent continued to the surface. At the surface the instructor put air into the trainee's BCD and she recovered. After checking that the trainee w as fit they continued the dive and training plan.

June 2009 09/206

Brixham Coastguard received a call from a dive boat w ith two divers onboard who had made a r apid ascent and missed stops and one of them was unwell. A doctor at the DDRC Ply mouth provided medical advice and the boat returned to shore for the divers to be transferred by ambulance to the hy perbaric chamber. (Coastguard report).

July 2009 09/209

Clyde Coastguard received a call requesting medical advice for two divers who had made a rapid ascent from 6m follow ing a 40m dive, had missed stops, but were not showing any signs or symptoms of DCI. Largs AWLB w as tasked to meet with the dive boat to transfer the divers ashore. The lifeboat w as met by Cumbrae Coastguard rescue team who transferred the divers to the hy perbaric chamber at Millport for treatment. The divers were later taken to Lady Margaret hospital for monitoring. (Coastguard & RNLI reports).

July 2009 09/217

Shetland Coastguard received a call from a dive boat reporting that they had a diver onboard w ho had made a rapid ascent after a dive to 38m. He w as not show ing any signs or symptoms of DCI, but he developed a headache shortly after the call for help was made. The boat still had other divers in the water so was unable to return to shore immediately . Lerw ick AWLB was tasked to evacuate the diver. The lifeboat returned ashore where they were met by an ambulance w ho transferred the diver to hospital for treatment. (Coastguard & RNLI reports).

July 2009 09/222

Humber Coastguard received a call from Seahouses lifeboat operations manager (LOM) that he had been made aware of a diver ashore w ho had made a rapid ascent from 22m. The LOM had already called an ambulance but w as put in a medi-link call w ith a dive doctor w ho spoke to the diver and advised him not to dive again that day, and to monitor his own condition. The diver was told that it w as only because he exhaled on ascent that he avoided suffering a lung expansion injury . He was told that if he felt worse he w as to contact the Coastguard for further help. (Coastguard report).

August 2009 09/246

A diver conducted a dive to a maximum depth of 29m. During his ascent he planned to conduc t a 5 min decompression stop at 6m. How ever, he w as too buoy ant and was only able to complete a 2 min stop before surfacing. He w as placed on oxygen for 20 min. No sy mptoms developed and no further action was taken.

August 2009 09/247

A pair of divers descended to dive a w reck in a maximum depth of 35m. One of the pair had difficulty clearing his ears during the descent. At the bottom of the shotline the dive leader attached a distance line and they moved about 30m away along the wreck. They turned to make their return and w hen they were about 10m from the shotline the diver w ho had had ear problems indicated that he wanted to ascend. The dive leader moved to unclip the distance line and when he looked back the diver had commenced his ascent w ithout him. The dive leader made a normal ascent including a 1 min safety stop. The troubled diver passed another pair decompressing on the shotline and these other divers indi cated to the dive leader that his buddy had already surfaced. The troubled diver w as recovered into the boat and given fluids and placed on oxy gen. The Coastguard w as alerted and the diver w as monitored. No symptoms were experienced by this diver and no further action was taken. It is thought that the diver panicked when he was low on air.

August 2009 09/252

A diver conducted a w reck dive to a maximum depth of 43m. He was using a new BCD which he had previously tried out in a pool and freshw ater site. He had reconfigured his weights, moving some of them to the BCD. During the dive he found that the w eights tipped him forw ard and he had to w ork to maintain his required posture. After about 12 min he had 6 min of decompression stops indicat ed. He w as having difficulty maintaining depth and he started a gentle buoyant ascent which carried him directly to the su rface missing his decompression stops. Once back in the boat he was placed on oxygen and the Coastguard w as alerted. He w as airlifted to a recompression chamber for treatment.

August 2009 09/365

Brixham Coastguard received a ca ll from a boat reporting that they had a diver who had missed stops, but w as not displaying any signs or symptoms of DCI. The boat returned to shore and made direct contact with the duty diving doctor at the hyperbaric chamber. The doctor advised on medication to be taken and that the diver's condition shoul d be monitored. (Coastguard report).

August 2009 09/285

Two divers entered the w ater to conduct a dive to a maximum depth of 18m. One of the divers had been too heavy on a previous dive and he removed w eights from his w eightbelt. During the descent he had to pull himself dow n the shotline. Around 25 min into the dive they had moved to a depth of 15m and this diver found it increasingly difficult to stay at depth. The other diver deploy ed a delay ed SMB to make the ascent but while he did so the buoy ant diver started a buoy ant ascent. He was unable to stop himself from being carried to the surface. The other diver ascended normally . Once back in the boat the

diver who had made the buoyant ascent was placed on oxygen. When they reached shore diving medical advice was sought and the diver was taken to hospital where he was placed on oxygen for 4 hours before being released.

August 2009 09/260

A pair of divers conducted a wreck dive to a maximum depth of 28m. They deployed a delayed SMB to make their ascent. They made their first stop at 15m for 1 min. While at this stop one of the pair took water in through his nose; the water had got into his mask. He tried to clear it but started to panic. He signalled to his buddy that he was going to ascend. He stopped at 7m for about 1 min and then surfaced. Once back in the boat he reported that he had missed stops. The Coastguard was alerted and the diver was airlifted to a recompression facility where he received treatment. (Coastguard report).

August 2009 09/298

Two divers conducted a dive to a maximum depth of 18m. They became disorientated in low visibility. One of the pair had a problem with his ears and the other diver came to assist. This diver then lost control of her buoyancy and made a rapid ascent to the surface missing stops.

September 2009 09/375

Portland Coastguard received a call from a dive boat reporting that they had two divers who were overdue to surface. Within a couple of minutes of making the call, the boat reported that they could now see the divers' SMB on the surface. The divers were recovered safe and well to the boat, having had to make a longer decompression stop due to problems with their rebreathers. (Coastguard report).

September 2009 09/380

Clyde Coastguard received a request from a dive boat for medical advice for a diver who had missed stops, but was not displaying any signs or symptoms of DCI. Medical advice from the hyperbaric chamber at Dunstaffnage was that the diver should be taken there for assessment and monitoring. He was transferred to Oban AWLB for transport to the chamber, but further medical advice from a doctor at Lorne & Isles hospital was that he should be taken to hospital instead as he was not showing any signs or symptoms of DCI. Therefore, the diver was transferred into the care of Oban CRT and taken to the hospital by ambulance. (Coastguard report).

September 2009 09/396

Shetland Coastguard received a call from a dive boat reporting they were returning to shore with two divers who had missed stops. They were met by Stromness CRT and an ambulance which transferred them to Stromness hyperbaric chamber for assessment. (Coastguard report).

Technique

October 2008 09/079

An instructor and three students w ere carrying out training drills in a maximum depth of 10m. One of the students w as towing an SMB and she noticed another group of divers using a shotline. She swam away to avoid entangling them and in doing so became separated from the rest of her party . After a short time looking for the others she made a normal ascent to the surface where she was reunited with her group.

November 2008 09/021

Two pairs of divers w ere engaged in a training dive. They practised mask clearing and two of the divers experienced difficulty with their hoods being pull ed backwards as they tried to pull the strap over their heads; one of the divers' mask strap became detached. Further into the dive they practised deploying a delayed SMB. While doing so one of the divers' alternative air source started to free flow . They w ere unable to stop the free flow so they made a controlled ascent to the surface, using one of the other divers' alternative air sources. During this ascent they made a 3 min stop at 6m.

May 2009 09/117

A diver surfaced in a panic and w as assisted by her buddy and other divers. A boat came to her assistance and after some difficulty her weightbelt and equipment w ere removed. She w as recovered into the boat follow ed by her equipment. She soon recovered and was returned to her own boat with her buddy. It is thought that over-weighting was the cause of the problem.

May 2009 09/134

An instructor and tw o trainees w ere practising the use of alternative air sources in a depth of 6m. During this practice one of the divers ingested some water. At the surface he felt unw ell and he left the w ater. Once out of the water he recovered but continued to feel sick.

May 2009 09/137

A pair of divers conducted a dive to a maximum depth of 18m. They follow ed a line underw ater and one of the divers' pillar valves and first stage snagged on the line. When this happened a second time the diver began to feel distressed and indicated that she wanted to ascend. She then started to make a buoy ant ascent. Her buddy stopped her from making a rapid ascent to the surface and they conducted a 3 min stop at 6m. At the surface the buddy inflated the distressed diver's BCD and called for assistance. The distressed diver w as recovered into a boat and brought ashore. She was placed on oxy gen and began to recover. She was using a hired semi-dry suit which was too tight and she reported that she had felt exhausted underwater.

June 2009 09/151

Three divers entered the water and dived to a depth of 18m. After about 4 min one of the divers signalled to the dive leader that he was out of air. The dive leader gave this diver his main regulator and started to breathe from his octopus regulator. He signalled the ascent and they made a normal ascent to the surface. Their dive duration w as 8 min. Once in the boat it w as discovered that the diver w ho had run out of air had, by mistake, entered the water with his pony regulator in his mouth rather than his main regulator.

June 2009 09/281

Three divers conducted a dive to a maximum depth of 30m. During their ascent, at a depth of 15m, one of the pair noticed that his computer w as indicating the necessity for a stop at 23m. Without communicating this with his buddies he re-descended. One of the others w ent after him and brought him back to 6m where they remained until all their computers had cleared. They then conducted an extra 1 min at 6m and 1 min at 3m. No subsequent ill effects w ere reported. It is thought that the diver had set his computer incorrectly.

August 2009 09/254

Two divers were ascending from a w reck dive to a maximum depth of 35m. They had deploy ed a delay ed SMB. During the ascent one of the pair w as buoy ant and rose straight to the surface missing a planned stop. In the confusion his buddy, who was carry ing the SMB reel, became tangled in the line. She tried, unassisted, to untangle herself at the 6m stop. Her breathing rate rose and she qui ckly consumed her air. When she surfaced she had insufficient air to inflate her BCD and her fins and legs w ere tangled in t he SMB line. The positioning of her pony regulator made it hard for her to reach it. She called for help and was quickly recovered into the boat.

Equipment

October 2008 09/016

Two divers descended to dive on a wreck. At 8m one of the pair developed a regulator free flow. The diver's buddy attempted to stop the free flow but was not successful. The diver with the free flow continued to sink and the buddy pushed him towards the top of the wreck to halt the descent. They stopped at a depth of 11m. The buddy passed the other diver his alternative air source and the air to the free flowing valve was shut off. When turned back on the free flow continued so it was turned off again. They ascended using the buddy's gas supply. Close to the surface the buddy turned the subject regulator back on again to enable the diver to inflate his BCD; this time it did not free flow. Both divers were safely recovered into the boat. Their dive time was 5 min.

January 2009 09/029

Two divers were engaged in a nitrox training course. They conducted a 38 min dive to a maximum depth of 20m. 2 hours later they dived again to a maximum depth of 20m. After 9 min the primary regulator of one of the pair started to free flow. The free flow could not be stopped and the diver switched to her octopus regulator and then to her pony regulator. Her buddy turned her main cylinder off then on again, but the free flow continued so the cylinder was switched off. At this point its contents gauge read 30 bar. They moved to a nearby shotline and made a controlled ascent to the surface. At the surface the main cylinder was switched back on again to allow the diver to inflate her BCD. The water temperature was 6 deg C.

March 2009 09/149

A pair of divers commenced a dive to 32m. After about 10 min one of the pair noticed that his breathing was starting to get difficult so he switched to his octopus regulator, this did not resolve the problem. He then switched to his pony cylinder but this contained nitrox 40 so he indicated to his buddy that he wished to use his alternative air source. They then started a controlled ascent. At 15m the diver who had had the problems switched to his pony regulator and they continued to the surface. Subsequent examination did not reveal the cause of the problems.

April 2009 09/321

An instructor and a trainee entered the water to practise ascents. They made themselves neutrally buoyant and then rose about 3m from the bottom. The trainee then began to struggle as it appeared that she had dumped too much air and was heavy; she began finning quite hard. Her mask had partially steamed up. The instructor signalled her to stop but she began to panic. The instructor took hold of her and signalled for her to stop but she continued to panic. The instructor was concerned that she would slide over a ledge into deeper water and he pushed her away from the edge. She landed on her back and continued to panic. The instructor brought her to the surface using a controlled buoyant lift. At the surface he inflated her BCD and she quickly recovered. They left the water safely. The trainee had a new mask and had not cleaned manufacturing deposits off the glass.

June 2009 09/150

Three rebreather divers conducted a 58 min dive to a maximum depth of 25m. During the dive one of the three lost weight from a pouch on his weighting system. He managed to maintain contact with the wreck throughout the dive and they made their way back to the shotline to make their ascent. In this way the diver was able to prevent a buoyant ascent. He reported that prior to losing the weight he was a little over-weighted and this helped him when the weights were lost.

July 2009 09/230

An instructor and two trainees conducted a training dive in a maximum depth of 15m to practise the use of an alternative air source. Later that day they dived again to practise controlled buoyant lifts. The instructor inflated a delayed SMB to act as a datum but her octopus regulator free flowed and would not stop. She took the alternative air source of one of the trainees and they made a safe ascent to the surface.

July 2009 09/232

A rebreather diver conducted a solo wreck dive to a maximum depth of 52m using a trimix diluent. After 30 min the alarm sounded on his rebreather and the master handset failed; the slave also failed. He bailed out onto a nitrox 32 cylinder and sent an emergency yellow signal buoy up his delayed SMB line. He made his way up to 6m for his final stop and when his cylinder was nearly depleted an emergency cylinder was lowered down to him and a diver followed. He managed to get his rebreather working again and he finished his decompression on 100% oxygen. The stand-by diver stayed with him.

August 2009 09/242

An operator filling a diving cylinder left an oxygen supply in an active state thus creating the potential for a subsequent user to inadvertently fill a cylinder with a rich nitrox mixture instead of the intended air. However the situation was found and rectified before a problem could arise.

September 2009 09/292

An instructor and two trainees descended a shotline to a depth of 15m. They were exploring a wreck when one of the trainees indicated to the instructor that his 16kg weightbelt was slipping down. The instructor led them back to the shotline and told the trainee to hang onto it. He then tried to reposition the weightbelt but did not succeed. He then fastened the weightbelt to the shotline and they made a normal rate ascent up the shotline with the buoyant trainee using the shotline to control his ascent.

Miscellaneous

January 2009 09/402
Two lifeboats launched to locate missing diver(s). False alarm. (RNLI report).

April 2009 09/329
Brixham Coastguard received a call from Devon & Cornw all police that they'd had a report of an SMB on the surface, and that a diver had surfaced but had seemed not to notice it. A boat in the area w as asked to see if they could see any diver's bubbles. The boat found the SMB and it turned out that it belonged to a free-diver who was okay. (Coastguard report).

April 2009 09/330
Holyhead Coastguard received a call reporting a dive boat who was over an hour overdue. How ever approximately 20 min after the call, the boat w as observed returning to the beach. It transpired that the boat had radio problems and w as making a slower than expected passage back from the dive site. (Coastguard report).

April 2009 09/331
Solent Coastguard received a call reporting discovery on the shore of an SMB, clothes and food and drink, w ith no diver visible in the vicinity . The local beach office w as requested to investigate and they found the items belonged to a diver who had been spear fishing for some c onsiderable time. The diver was advised to let the beach office know next time he w as in the water. (Coastguard report).

May 2009 09/333
Portland Coastguard received a call from a dive boat, reporting another dive boat near it that seemed to be having difficulty in recovering a diver. Communications were eventually established with the dive boat, who reported that the diver had been recovered and they needed no further assistance. (Coastguard report).

May 2009 09/124
The Coastguard was alerted when two divers were about 10 min overdue from a dive to 27m. S hortly afterw ards the divers surfaced safely and the emergency services w ere stood dow n. Their dive duration w as 73 min. They had spent longer than initially planned decompressing on the shotline. (Coastguard report).

May 2009 09/334
Brixham Coastguard received a call reporting a diver in difficulties while on a shore dive. Torbay AWLB & Coastguard was tasked to investigate the report. How ever, a subsequent call advised that the diver had been seen to exit the water. The Coastguard rescue team spoke to him to confirm he did not need any assistance. (Coastguard & RNLI reports).

May 2009 09/412
Lifeboat launched to assist divers. (RNLI report).

May 2009 09/338
Forth Coastguard received a 999 call reporting divers possibly in difficulty offshore. Ey emouth CRT and ALB w ere tasked to investigate, but the divers w ere confirmed safe and w ell by another dive team. (Coastguard report).

May 2009 09/337
Yarmouth Coastguard received a call about two dive boats diving within the exclusion zone around an offshore gas production platform. The rig standby vessel launched its rescue craft to speak to the boats about correct procedures for diving in the area. Additionally, the dive boats w ere not displaying flag alpha. They left the area to return to shore sometime shortly afterwards. (Coastguard report).

May 2009 09/341
Belfast Coastguard received a 999 call reporting a diver firing distress flares. Red Bay ILB and Ballycastle CRT were tasked to make a thorough search of the area, but no diver in distress w as located. (Coastguard & RNLI reports).

June 2009 09/342
Solent Coastguard received a 999 call from the lifeguards reporting tw o divers possibly in difficulty on the surface. Newhaven CRT and AWLB w ere tasked to investigate but as they were preparing to proceed, the lifeguards reported that they had swum out to the divers on their rescue board and ascertained that they w ere okay . It seems that they had been raising their arms to let air out of their dry suits. (Coastguard & RNLI reports).

July 2009 09/428
Two lifeboats launched to assist dive boat. (RNLI report).

July 2009 09/323
An instructor and a trainee dived to a w reck in a depth of 17m. Other divers swam past them and kicked up slit w hich dramatically reduced the visibility . To find better visibility they followed a line to another close by wreck. This wreck was known to have fishing line tangled inside it and the divers had been warned not to go inside. As they swam over this wreck visibility was again reduced by silt. The trainee suddenly stopped and signalled that he could not move. The instructor checked and found that the trainee's legs had dropped into a hole in the wreck and one of his fins had become trapped. The instructor checked the trainee's air and then tried to free him but he could not. He waited for the silt to clear but it didn't. Eventually the trainee was able unclip his fin and pull his leg free. They moved to a harbour wall and used this to make their ascent to the surface. The trainee struggled to stay down with buoyancy problems and only one fin. They surfaced safely.

July 2009 09/352
Portland Coastguard received a call from a local w ork boat reporting that they had found a diver's SMB w ith the line fray ed. The boat made a search of the area and found no diver/s in distress. With no diver having been reported as overdue or missing, it was considered that it w as a just a stray SMB, a false alert with good intent. (Coastguard report).

July 2009 09/355
Portland Coastguard received a report from Portland National Coastwatch Institution (NCI) of a lone diver w ho had drifted past holding their SMB, and with no sign of any dive boat in the area. Portland Bill Coastguard rescue team w ent to the NCI to

investigate, but by the time they arrived it was reported that the diver had exited the water and rejoined their buddy. It transpired that the individuals had been snorkelling, were well equipped and were aware of the tides in the area. False alert with good intent. (Coastguard report).

July 2009 09/236

The emergency services were alerted when a member of the public spotted an empty boat offshore. A lifeboat was tasked to investigate and when it arrived on the scene the owner of the boat surfaced; he had been diving alone and was not displaying flag Alpha. (Media report).

July 2009 09/357

Portland Coastguard received a call from a boat reporting that they had found a diver's SMB, with no sign of any diver. Weymouth ILB was tasked to investigate. The ILB found the SMB, but could find no divers in the area and there had been no reports of any one missing. False alarm with good intent. (Coastguard report).

August 2009 09/259

A diving party was participating in a boat handling course when a member of the public lost control of a vehicle whilst backing a boat and trailer down a slipway. The vehicle sank into the water and the trailer and boat jack-knifed behind it. The dive party assisted the driver to get out of the vehicle and into the boat that they had been trying to launch. They brought him ashore and helped him to recover. They then recovered the partially sunken vehicle and trailer.

August 2009 09/439

Lifeboat launched to investigate abandoned dive boat. False alarm. (RNLI report).

August 2009 09/371

Forth Coastguard received a 999 call reporting a lone diver spotted from the shore to be drifting. Eyemouth AWLB & CRT were tasked to investigate, but before they could proceed the informant called back to report that the diver was now closer to the shore and indicating to someone there that he was alright. The Coastguard team and lifeboat continued to the scene to confirm that everyone was accounted for. (Coastguard report).

September 2009 09/373

Forth Coastguard received a 999 call from someone ashore reporting he could see a diver calling for help, with a dive boat nearby. While the caller was watching the diver was recovered into the nearby boat. (Coastguard report).

September 2009 09/377

Brixham Coastguard received a 999 call from someone onshore reporting two divers in the water whistling for help. Berry Head CRT, Torbay AWLB, ILB and another dive boat responding to an urgency broadcast proceeded to assist. However, before they arrived it was reported that the divers were from a boat who was recovering some of their other divers, and they were just whistling to get the boat's attention to their position. They were recovered by another boat and taken back to their own boat. (Coastguard report).

September 2009 09/294

An RHIB was returning to harbour from a dive when they spotted a diver in the water, close to the harbour, in apparent difficulty. Because of nearby rocks the boat could not get close to the diver so a diver from the boat swam to the troubled diver and towed him to the boat. The diver was recovered into the boat and placed on oxygen. The Coastguard was contacted but was already aware of the problem having been alerted by others. A lifeboat arrived to assist. The diver recovered and refused further treatment. He had been diving alone using a diver propulsion vehicle for the first time. He had become inverted in his drysuit and exhausted himself. He had ditched all his diving equipment. The rescuing divers subsequently recovered his lost equipment for him.

September 2009 09/398

Brixham Coastguard received a call from someone ashore reporting they had been watching an SMB for some time, it hadn't moved so they were concerned that there may be a diver in trouble. Torbay CRT were sent to meet with the caller, and they were able to confirm that the SMB belonged to a snorkeller who had tied it to a crab pot and gone off snorkelling. (Coastguard report).

Overseas Incidents

Decompression Illness

October 2008 09/017

During a 46 min dive to 24m a diver experienced ear problems. He was subsequently given ear drops and antibiotics and he missed the next four days diving. On the fifth day he dived to 36m for 40 min in the morning and to 35m for 38 min in the afternoon. At the end of this dive he made a faster than normal ascent from 11m to 6m. Some time after surfacing he experienced chest pains; he breathed oxygen for 10 min and took indigestion tablets. Three days later he took a flight home during which he developed chest pains again. Diving medical advice was sought. He went to hospital and a minor air embolism was diagnosed. The following day the symptoms had cleared.

November 2008 09/026

A diver conducted a series of dives over a number of days. On the penultimate day he dived to 16m for 42 min then later to 12m for 40 min. On the last day he dived to 16m for 33 min after a surface interval of 23 hours. During the ascent from this last dive he conducted a 3 min safety stop at 5m. Once back on land the diver felt dizzy and had 'pins and needles' in his hands. He was placed on oxygen and taken to hospital from where he was moved to a recompression facility for treatment for DCI. The diver had felt cold before entering the water for the last dive and there was a slight current; it is thought that these factors may have contributed.

January 2009 09/032

A diver conducted a 31 min dive to a depth of 17m. The following day, 21 hours later, he dived to 20m for 43 min. 2 hours 41 min later he dived to 20m. At the end of this dive the diver and his buddy swam, mid-water, at a depth of 10m, back towards the shore. During this swim the diver became too buoyant; he dumped air from his BCD and this made him heavy. The diver sank down to 15m. He put air into his BCD to stop the descent but over compensated and made a buoyant ascent to the surface; his dive duration was 33 min. The other diver made a normal ascent to the surface; his dive duration was 36 min. They regrouped at the surface and swam safely to the shore. The following day, the diver who had made the rapid ascent developed 'pins and needles' in his right arm and a dull pain in his right shoulder. The diver appeared to have no other symptoms and he was placed on oxygen and after 20 min the 'pins and needles' reduced. After a further 30 min the 'pins and needles' had gone but the pain in his shoulder remained. Medical advice was sought and the diver was given recompression treatment which resolved his symptoms.

March 2009 09/127

A diver conducted a dive to a maximum depth of 29m. Her computer malfunctioned while she was underwater so she stayed close to the dive leader. During the final ascent they made a stop at 3m. During this stop the diver felt that she could not get enough air into her lungs, she began to hyperventilate and was unable to control her breathing. After 2 min she surfaced, got into the boat and asked for oxygen. Her breathing was shallow and 'gurgling' and the oxygen did not help much. She coughed up pink froth. She was taken to hospital where a pulmonary oedema and heart attack were diagnosed. Subsequent investigations revealed that she had a PFO and it was thought that a bubble had shunted into her coronary artery causing a blockage.

June 2009 09/154

A diver completed his third dive of the day, a 37 min dive to 22m with a 3 min stop at 5m. He had been diving for a total of three days. About 10 min after surfacing he noticed a pain in his left shoulder. He was not concerned as this was the site of a r r ce nd m g

March 2009 09/084

A trainee diver conducted a dive and, after a surface interval of 2 hours, he entered the water for a second dive. He descended to 6m but was unable to clear his left ear at this depth. He ascended to 3m and tried again but could not clear the ear. He left the water. Later he sought medical attention and a bruised left eardrum was diagnosed. He was advised not to fly or dive for a period of five days.

June 2009 09/177

A trainee diver and an instructor conducted a dive to a depth of 20m. The trainee had broken her own mask and dived with one loaned by another diver. This mask was of a much larger volume and during the ascent the trainee was unable to clear the mask properly. She suffered mask squeeze and the instructor, unable to assist her, aborted the dive. Their dive duration was 7 min. Once out of the water the trainee was found to have sinus pain and a bloodshot left eye. Both her eyes quickly puffed up and she was taken to hospital. She was prescribed pain killers.

August 2009 09/283

A diver was recovered from the water with a head injury which was bleeding. He reported that he had not seen a trigger fish on the seabed which had caused his injury. First aid was given on site.

August 2009 09/287

A diver entered the water from a jetty which was 2m above the water surface. Contrary to instructions he looked down as he completed a stride entry. His face mask was shattered by the incident and he received a cut to his eyelid.

September 2009 09/271

Two divers entered the water from an RHIB. A buoyancy check was conducted and one of the divers added some weight to his belt. The divers descended and the diver who had had the extra weight did not seem comfortable. He was swimming awkwardly, breathing heavily and showed signs of anxiety. His mask was flooding and he did not seem to be able to clear it. His buddy tried to help but the troubled diver indicated that he wanted to ascend. His buddy took hold of him and used a controlled buoyant lift to bring them to the surface. During the ascent, at a depth of about 10m, the troubled diver stopped responding to signals, he coughed some blood and lost the regulator from his mouth. His buddy replaced the regulator and brought him to the surface. They were recovered into the boat. The troubled diver was conscious but not fully aware. The emergency services were alerted and the boat returned to shore. Both divers were taken to hospital, the buddy was declared fit immediately, the troubled diver was discharged after 2 hours on oxygen.

September 2009 09/290

A diver completed a 37 min dive to 30m with a 3 min stop at 6m. 2 hours 28 min later he dived to 25m for 38 min with a 3 min stop at 6m. Later that day he was walking when he felt very dizzy and developed double vision. He lay down and diving medical advice was sought. He was taken to hospital and placed on oxygen for 6 hours. Various tests were conducted but nothing untoward was found. His symptoms resolved and he was released later the following day. It is thought that dehydration rather than DCI was the cause.

September 2009 09/291

A trainee experienced problems clearing his ears during a descent. The group ascended to 2m and the trainee indicated that he wished to descend again. Once again he was unable to clear his ears and the dive was aborted. The diver sought medical attention and was advised to cease diving.

September 2009 09/293

A trainee was taking part in a controlled buoyant lift practice from a depth of 4m when he developed a sharp pain in the sinus over his left brow. On surfacing the pain eased. He sought medical attention.

Boating and Surface

February 2009 09/039

A diver was attempting to attach the painter of an RHIB to a buoy marking a wreck. His foot became trapped between a decompression cylinder and a water container. He pulled to release his leg and as his leg became free a swell hit the boat, he lost balance and fell overboard. He was wearing a dry suit and a lifejacket. The lifejacket automatically inflated and he was recovered into the boat. No subsequent adverse effects were experienced.

Ascents

November 2008 09/034

A group of divers conducted a dive to a maximum depth of 35m. 6 min into the dive, at a depth of 34m, one of the group was seriously affected by nitrogen narcosis and he became unresponsive. His buddy started to lift the troubled diver using a controlled buoyant lift and a third member of the party came to help. The troubled diver began to panic and bolted for the surface. In doing so he lost his regulator. He made a rapid ascent to the surface taking with him the third diver, who was trying to replace his regulator and to slow the ascent. The buddy surfaced shortly afterwards. The distressed diver was still panicking and others helped to remove him from the water. The troubled diver showed no signs of DCI but he was placed on oxygen. The diver was assessed by a doctor and no adverse effects were identified.

Technique

January 2009 09/028

A newly qualified diver on holiday conducted his first dive to 16m for 20 min. During this dive his air consumption was very high. 3 hours later he made a second dive and was given a larger cylinder and briefed on buoyancy control and relaxing. He appeared nervous so a slow pace was adopted. During the dive, at a depth of 18m, he became frustrated that he couldn't control his buoyancy as well as he wanted to and he struggled to cope with a slight current. He worried that his breathing rate was too high, he started to hyper-ventilate and he took in some water. His buddy and the dive leader took him to the surface. His weightbelt was ditched and he was assisted from the water. He was sick at the surface and again in the boat. He was placed on oxygen and monitored for symptoms of DCI. Once ashore he was seen by a doctor but no ill effects were found.

March 2009 09/085

Two divers entered the water and descended a shotline. At the

bottom, at a depth of 22m, the first diver looked back to see his buddy some w ay up the line. The buddy w as delay ed by problems w ith clearing his ears. The first diver signalled the second but got no reply so he re-ascended 7m w here he found the other diver off the line trying to clear his ears. The first diver indicated that the troubled dive r should hold on to the line and after confirmation he re-descended. At this point they became separated. The first diver lost sight of the troubled diver so he made an ascent to the surface and left the w ater. The second diver descended, on his ow n, off the line, and joined other divers from the party. After a w hile he indicated to these divers that he had lost his buddy, they indicated that the buddy had ascended and the diver then made his way back to the surface.

Equipment

October 2008 09/078

Two divers conducted a 35 min dive to 13m. At the surface, at the end of the dive, one of the pair experienced difficulty maintaining positive buoy ancy. He tried both direct feed and oral methods to inflate his BCD but without success. His buddy tried too but failed. The diver held onto the SMB to provide buoyancy and they were recovered into the boat. Once out of the water it w as discovered that the inflator hose on the diver's BCD had become detached from the bag of the BCD thus allowing the air to escape.

February 2009 09/040

Two divers conducted a training dive on a wreck to a maximum depth of 25m. They completed a controlled buoyant lift practice to 6m and then re-descended to 20m to try to reach the w reck again. A current carried them aw ay from the w reck and they decided to abort the dive. One of the divers deployed a delayed SMB. As they started the ascent the other diver noticed that his equipment w as pulling to the right and he discovered that a weight had fallen from the left side of his integrated weight system. Despite this he w as able to make a normal ascent including a 3 min safety stop at 6m.

February 2009 09/041

A pair of divers descended to a maximum depth of 25m on a wreck. During the dive, at a depth of 16m, one of the pair moved into a horizontal position and both w eights fell from the pouches of his integrated w eight system. He w as able to make his way to a shotline and he used this to make a normal ascent, including a 3 min safety stop at 6m. This diver had been careful to check his weights prior to the dive as another diver had lost a weight from a similar weight system earlier that day.

March 2009 09/083

An instructor and a trainee were ascending from a dive to 26m and, at a depth of 12m, the trainee attempted to deploy a delayed SMB. His regulator began to free flow and he started to sink back down. The instructor gave the trainee his ow n alternative air source and attempted to stop the trainee's free flow by breathing from this regulator. This w as unsuccessful and the trainee's air supply began to fail. The instructor returned to his own primary regulator and brought the trainee to the surface using a controlled buoy ant lift. Their dive duration was 21 min. No subsequent ill effects w ere experienced. The regulator was checked but no fault was found.

May 2009 09/303

A dive group experienced a series of 'O' ring failures, ty pically they occurred about 10 min into the dive and in each case the buddy provided his alternative air source to bring the affected diver to the surface. Examination revealed that the 'O' rings were smaller than they should have been and had become brittle. A new supply of 'O' rings was obtained and fitted.

May 2009 09/132

Three divers conducted a dive on a w reck to a maximum depth of 35m. During the dive, at a depth of 23m they prepared to enter into the wreck. Two divers moved in expecting the third to follow. However, as the third diver entered the wreck one of the weight pouches on his integrated w eighting system caught on the wreck and the w eights dropped aw ay. He rose up until he was stopped by the roof of the section of w reck that he was entering. His buddies realised that there w as a problem and returned to help. The w eights had landed on a ledge just below the diver and the others recovered them and assisted the diver to refit them. The dive then proceeded as planned.

September 2009 09/288

A diver was preparing for a dive. During his air checks the high pressure hose to his cylinder pressure gauge split close to the junction with the regulator first stage.

Miscellaneous

August 2009 09/286

An instructor and two trainees descended a shotline to a w reck at a depth of 16m using nitrox 36. They proceeded along the deck to a large open hold. They descended into the hold to a depth of 20m. At this point one of the trainees started to panic and to hyperventilate. The instructor took hold of the trainee and brought him to the surface us ing a controlled buoy ant lift. The other trainee followed them to the surface. All three w ere safely recovered from the water and the trainee made a sw ift recovery.

INCIDENT REPORTS

If you would like to add to, correct or place a different inte rpretation 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.

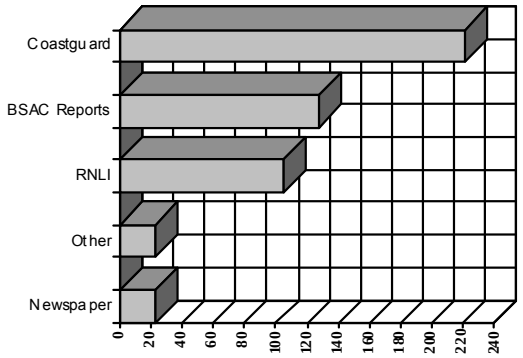
Incident Report Forms can be obtained free of charge from the BSAC Internet website
http://www.bsac.com/incidents
or by phoning BSAC HQ on ***0151 350 6200***

Numerical & Statistical Analyses

Statistical Summary of Incidents

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Incidents Reported	385	351	315	397	452	397	439	465	453	409	498	499	437	401	416	453
Incidents Analysed	385	351	315	370	431	382	417	458	432	392	445	474	418	377	381	409
UK Incidents	322	318	295	349	404	357	384	433	414	366	423	441	379	349	359	381
Overseas Incidents	9	33	20	21	27	25	33	25	18	26	22	33	39	28	22	28
Unknown Locations	54	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
UK Incident - BSAC Members	164	157	136	101	135	128	113	122	149	162	154	160	148	120	129	120
UK Incident - Non-BSAC Members	8	20	4	29	52	47	52	94	55	74	72	65	50	61	65	29
UK Incident - Membership Unknown	213	178	175	219	217	182	219	217	211	130	197	216	181	168	165	232

UK Incident Report Source Analysis



Total Reports: 500
Total Incidents: 381

History of UK Diving Fatalities

		Number of Fatalities	
Year	**Membership**	**BSAC**	**Non-BSAC**
1965	6,813	3	-
1966	**7,979**	**1**	**4**
1967	8,350	1	6
1968	**9,241**	**2**	**1**
1969	11,299	2	8
1970	**13,721**	**4**	**4**
1971	14,898	0	4
1972	**17,041**	**10**	**31**
1973	19,332	9	20
1974	**22,150**	**3**	**11**
1975	23,204	2	-
1976	**25,310**	**4**	**-**
1977	25,342	3	-
1978	**27,510**	**8**	**4**
1979	30,579	5	8
1980	**24,900**	**6**	**7**
1981	27,834	5	7
1982	**29,590**	**6**	**3**
1983	32,177	7	2
1984	**32,950**	**8**	**5**
1985	34,861	8	6
1986	**34,210**	**6**	**9**
1987	34,500	6	2
1988	**32,960**	**10**	**6**
1989	34,422	4	8
1990	**36,434**	**3**	**6**
1991	43,475	8	9
1992	**45,626**	**9**	**8**
1993	50,722	3	6
1994	**50,505**	**6**	**6**
1995	52,364	9	9
1996	**48,920**	**7**	**9**
1997	48,412	4	12
1998	**46,712**	**6**	**16**
1999	46,682	8	9
2000	**41,692**	**6**	**11**
2001	41,272	9	13
2002	**39,960**	**4**	**10**
2003	38,340	5	6
2004	**37,153**	**6**	**19**
2005	37,185	5	12
2006	**35,422**	**4**	**12**
2007	34,857	7	5
2008	**34,325**	**6**	**4**
2009	32,790	7	7

LIST OF ABBREVIATIONS USED IN THIS AND PREVIOUS INCIDENT REPORTS

A&E	Accident and emergency department at hospital
AED	Automated External Defibrillator
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
CRT	Coastguard rescue team
DCI	Decompression illness
DDRC	Diving Diseases Research Centre (Plymouth, UK)
DSC	Digital selective calling (emergency radio signal)
ECG	Electrocardiogram
EPIRB	Emergency position indicating radiobeacon
FAWGI	False alarm with good intent
FRS	Fire and rescue service
GPS	Global positioning system
Helo	Helicopter
HLS	Helicopter landing site
HMCG	Her Majesty's Coastguard
ILB	Inshore lifeboat
INM	Institute of Naval Medicine
IV	Intravenous
LB	Lifeboat
MCA	Maritime & Coastguard Agency
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