

# **The British Sub-Aqua Club**



## **NDC Diving Incidents Report 2000**

*Compiled by*

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## Introduction

This booklet contains the year 2000 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 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:-

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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:

<i>MONTH/YR OF INCIDENT</i>	<i>INCIDENT REF.</i>
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 2000*

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## 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:

**Reg Hill, Coastguard Sport Diving Liaison Officer**

**Peter Bradley, Sea Safety Liaison Officer, 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**

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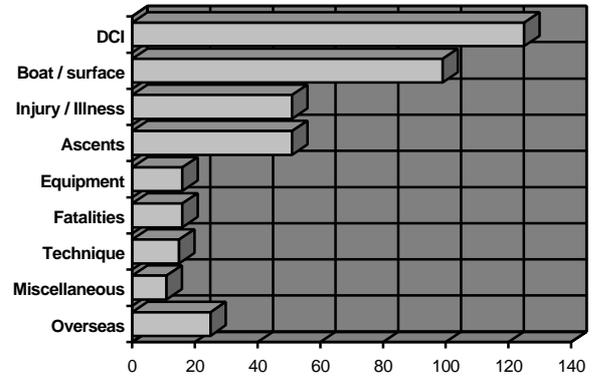
## Overview

**2000** has seen a slight rise in the total number of incidents that have been reported. In the 2000 incident year (October 99 to September 00 inclusive) 417 incidents have been recorded, compared with 382 in 1999 and 431 in 1998.

This year the BSAC reinstated its subscription to a press cutting service (which was suspended during the last incident year) and this will account for a small part of the increase over 1999.

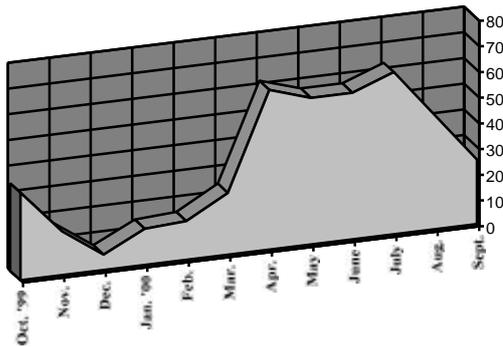
Conversely a small reduction will have occurred due to the non-availability of data from the RNLI from the end of July 00 onwards. This occurred because the RNLI are in the process of updating their computer systems. It is anticipated that the 2001 report will see a return to normal.

The distribution of these reports is shown in the following chart. As can be seen, 68% of these incidents have occurred in the summer period. This is totally consistent with previous years, reflecting the increased number of dives that take place during the warmer weather.



This chart indicates 16 incidents involving fatalities, but one of these was a double fatality.

### Monthly breakdown of all incidents - 2000



### **Incidents by category**

The incident database categorises all incidents into one of nine major categories, and the following chart shows the distribution of the 2000 incidents into those categories.

This chart reflects an important change from previous years. DCI incidents have overtaken surface and boating incidents.

The number of incidents of DCI has risen from 86 in 1999 to 125 in 2000, whilst the number of surface and boating incidents has fallen from 114 in 1999 to 99 in 2000. The number of incidents reported is relatively small and some variability from year to year must be expected; however such a rise in cases of DCI is of concern. DCI is covered later in this summary report and the major causal factors are identified.

The reduction in the number of surface and boating incidents is almost all due to a 20% reduction in the number of cases of lost divers. These incidents typically involve divers who, upon surfacing at the end of their dive, find themselves out of contact with their boat, and very often a long and expensive search takes place, almost always successfully. This subject has been highlighted in many previous reports and presentations on diving statistics, and it is hoped that this is a real trend indicating that divers and dive marshals are taking more care with this issue.

### Categorisation of the year's incidents

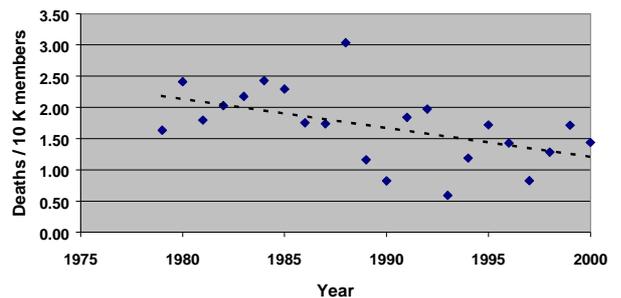
### **Fatalities**

The report includes 17 UK fatalities of which 6 involved BSAC members. 17 Fatalities is in line with the average number of UK fatalities that have been experienced in the last five years (17.8) but it is higher than the average of the last ten years (15.3), indicating a continuation of the trend of increasing deaths that was identified last year.

Fatalities of BSAC membership are just below the averages of the past five and ten years.

The following chart shows the number of deaths per 10,000 BSAC members for each of the last 22 years and a clear downward trend can be seen.

### **BSAC Fatalities**



The trend line indicates a near halving of the fatality rate during this period. During this time diving has certainly become more adventurous with the advent of fast small boats and specialist hardboats bringing easy access to much more challenging sites. Given this background, one might have expected a significant increase in the number of fatal incidents and yet we see an apparent doubling of safety in this period.

Each fatality is a tragedy and we must not become complacent but we should recognise what has been achieved. A number of factors are likely to have been at work here but the quality of the BSAC training programme and the high standards of all of our instructors clearly lays at the heart of this welcome trend.

The causal factors behind the UK fatalities can be summarised as follows:-

- Two cases involved people who experienced serious but unforeseeable medical problems whilst in or under the water.
- Four cases involved deep dives.  
In three of these cases divers may have accidentally gone to, or have been swept to, depths deeper than planned.  
The fourth case involved a diver who was using a rebreather and who was returning from a dive to 82m when he got into difficulties. This diver was not recovered and the cause of the problem is not known.
- A second case of a fatality of a diver using a rebreather occurred when the diver surfaced unconscious from a wreck dive. Again the exact cause is not known.
- One case involved a diver who was diving solo with a single person attending in a boat. This diver's body was eventually recovered from the seabed at a depth of 6m.
- One case involved a diver who had become tangled in some ropes at the surface during a shore dive. The exact cause of the problem is not known.
- Two cases involved air supply problems.  
One diver ran out of air and was lost during an attempted ascent using the other divers alternative air source.  
In the second case a diver experienced regulator problems and made a rapid ascent to the surface where he was found unconscious.

This leaves six remaining cases where there is simply insufficient information to draw any conclusions with respect to the causes.

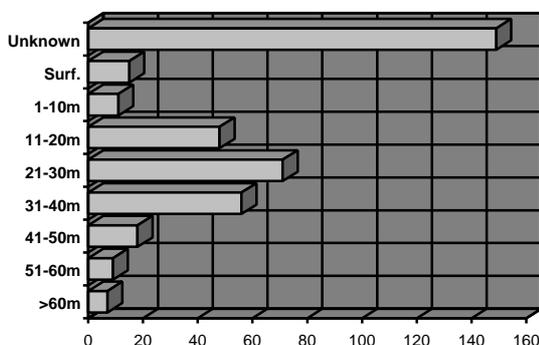
- Two involved divers who became unconscious whilst underwater and, although they were recovered at the time, they did not survive.
- Four involved divers who were lost underwater. The body of one was recovered 4 weeks later and three are still missing at the time of writing.

In many of the above cases it is clear that accepted safe diving practices were not being followed.

### Incident depths

The following chart shows the maximum depth of the dive during which the incident took place, summarised into depth range groupings.

**Maximum depth of dive involving an incident**



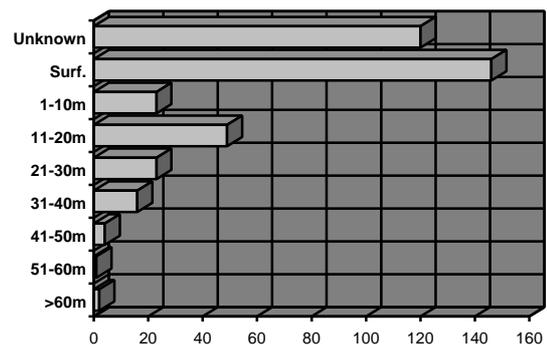
The pattern is very similar to that normally seen and reflects the frequency of diving in these depth ranges.

There is a continuation of the trend identified last year of dives to over 50m. In 1998 6 incidents involved dives to over 50m, in 1999 the number was 12 and this year it is 16.

Three of these sixteen incidents at depths of over 50m resulted in fatalities; this is a significantly higher fatality to incident ratio than is seen in the shallower depth ranges. The potential for problems increases significantly as diving depth increases. The BSAC advises that no dive should be deeper than 50m, and that dives to 50m should only be conducted by divers who are appropriately trained and qualified. The recommended limit for divers trained to Sports Diver standard is 35m and then only when they have received appropriate training for diving at this depth.

The next chart shows the depth at which the incident started. Inevitably the data is 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.

**Depth at which an incident started**



Other surface incidents involve boats and boating incidents. 2000 has been a typical year for boating problems. 53 incidents involved engine failure, and 10 cases involved problems with boats themselves.

As reported earlier, the numbers of divers becoming separated from their boats has reduced from 51 instances in 1999 to 40 reported in this incident year.

Inadequate maintenance is certain to be the cause of many of the engine problems.

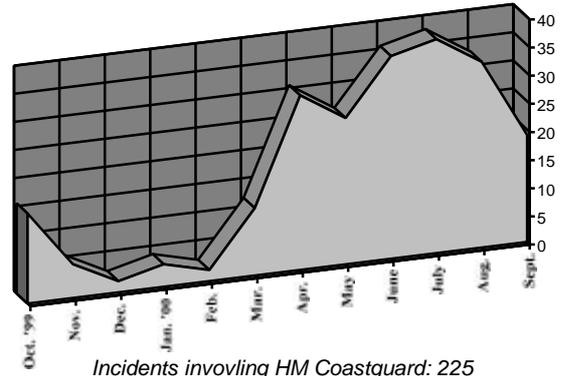
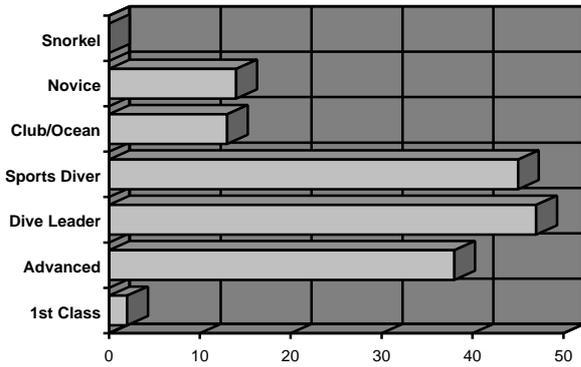
Engine failure, with divers underwater, often results in lost divers since the boat is no longer able to recover them. These divers are then left floating at the surface until discovered. The search operation is often very extensive with lifeboats, other craft and helicopters deployed to find the missing divers.

As in previous years, the benefits of effective surface detection aids are highlighted, especially in the Coastguard reports.

### Diver Qualifications

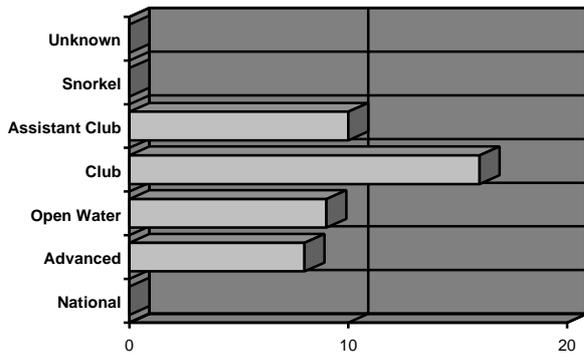
The next two charts show the qualification of those BSAC members who were involved in reported incidents.

**Qualification of the divers involved in incidents**

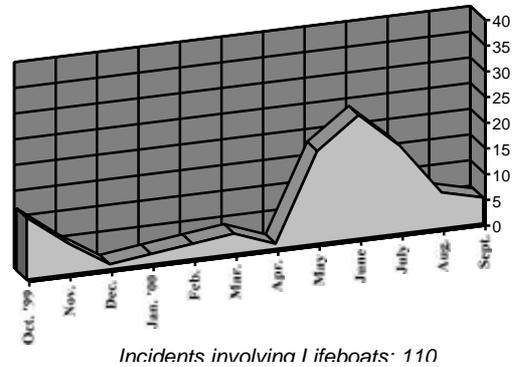


It is important to note that these divers were involved in the incident but this does not necessarily mean that they suffered the effects of it. Some were involved as rescuers or in some other indirect way.

**Qualification of instructors involved in incidents**



**Divers' use of RNLI facilities by month**



An analysis of incident by diver qualification shows that no grade of diver, from novice to instructor, is immune to problems. It is all too easy to make the assumption that only inexperienced divers get into problems, but the chart shows that this is not so.

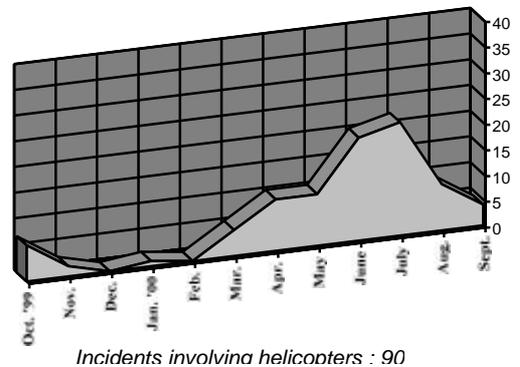
Although the data suggest that divers at the level of Sports Diver are the most prone to problems one must be careful in the interpretation of these data. The picture is clearly distorted by the numbers of members that we have at each of these grades. It is very probable that the largest single group of members are Sports Divers, hence the high incidence of problems.

The distribution of these qualification data conforms to the pattern seen in previous years.

**Divers' use of the Emergency Services**

Divers' use of the rescue services shows a monthly distribution aligned to the distribution of all incidents, and is clearly correlated with the number of dives that are taking place. Our demands upon the Coastguard service were typical for the year, as were our calls upon the services of the RNLI.

**Divers' use of SAR helicopters by month**



**UK Incidents involving the Coastguard agency - Monthly breakdown**

**Decompression Incidents**

The BSAC database contains 125 reports of DCI incidents, some of which involve more than one casualty. When these multiple cases are counted the result is 134 incidents of DCI.



In 1999 there were 86 cases of DCI recorded and in 1998 the number was 120; sadly, the improvement that was indicated last year was not maintained.

An analysis of the causal factors associated with these cases indicates the following:-

- 47 involve diving to greater than 30m
- 46 involve rapid ascents
- 30 involve missed decompression stops
- 24 involve repeat diving

Some cases involve more than one of these causes.

The report includes several cases of 'Diver illness' reported by the RNLI and whilst the nature of this illness is not recorded it is very likely that these are further cases of DCI.

Poor buoyancy control is at the heart of the majority of these cases. Divers are failing to correctly control their ascent, especially in the critical last 10m zone and ending up with rapid ascents and/or missed decompression stops. Very often the diver is using a drysuit and is unable to prevent a buoyant ascent.

Better training is clearly indicated and Diving Officers, Training Officers and Instructors should work to ensure that the skills of their trainees are particularly well practised in this area.

Several of the incidents involve divers using unfamiliar equipment and ending up with buoyancy problems. It is important to familiarise oneself with new equipment in a safe environment prior to using it in more challenging circumstances.

Whenever possible it is safest to ascend from the dive using a shotline, this will provide the diver with the opportunity to stop and correct a buoyancy problem before an uncontrolled ascent and accompanying pressure reduction takes place; once a rapid ascent is underway it is very hard to stop.

## In Conclusion

The 2000 incident year has not highlighted any major new concerns. Most of the incidents reported within this document could have been avoided had those involved followed a few basic principles of safe diving practice. Those that I would emphasise, as I have done before, are:-

- Dive within your limits.
- Build your experience gradually.
- Practice the basic skills until you are faultless, and then keep in practice.
- Plan and equip yourself correctly for the dive.
- Maintain constant vigilance whilst involved in diving activities and be ready to act quickly as soon as things start to go astray.
- Ensure that equipment is fully and correctly serviced (both diving and boating).

Please read the detailed reports in this booklet carefully and use them to learn from others' mistakes. They have had the courage and generosity to record their experiences for publication, the least that we can do is to use this information to avoid similar problems.

Finally, if you must have an incident please report it on our Incident Report form, available free from BSAC HQ or via the [BSAC internet website](#).

As always, your anonymity is assured – great care is taken to preserve the confidentiality of any personal information recorded in BSAC Incident Reports.



## Fatalities

### October 1999 00/010

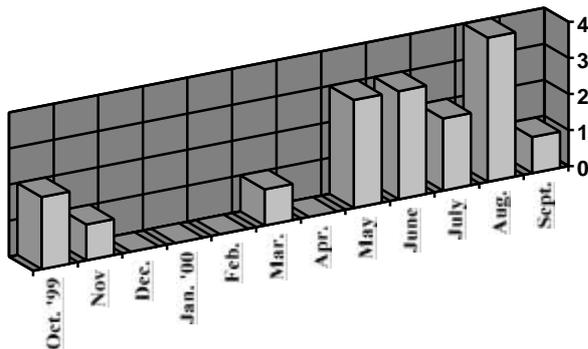
Two divers entered the water to start their dive. They descended to 6m where one felt that he was under-weighted. They returned to the boat for extra weights. They descended again but he still felt light and they decided to abandon the dive. At the surface he was seen to be unconscious by his buddy who towed him to some nearby rocks. Here she removed his kit and pulled him onto the rocks. Some time passed before she was able to attract the attention of people on the boat. The boat was collecting other divers. Once the situation was realized the boat approached the rocks and another diver swam to assist. He discovered that the unconscious diver had no pulse and commenced CPR. The Coastguard was alerted and a helicopter and lifeboat went to assist. The unconscious diver was recovered by helicopter and taken to hospital. The others were recovered by the lifeboat and all returned to shore. The unconscious diver was pronounced to be dead on arrival at hospital.

Two trainees and an instructor were at 27m when they were caught in a powerful down current. The instructor attempted to fin himself and the trainees upwards but the current carried them down to 46m. The instructor inflated the BCD of one of the trainees, but the other was lost. The instructor and one trainee managed to return safely to the surface. Other divers entered the water to search, they found a fin, then a note pad and finally the missing diver's body, at a depth of 55m. They brought her to the surface and a lifeboat and helicopter assisted. The diver was brought ashore but failed to recover.

### March 2000 00/066

Two divers were conducting a shore dive. They surfaced 180m offshore from a depth of 8m. They were seen to be in distress, and are believed to have been tangled in some buoys. Members of the public alerted the Coastguard and a lifeboat was launched. A small dinghy was launched to assist but this capsized. One of the divers brought the other to the shore where resuscitation attempts were made. The capsized dinghy and its owner were recovered by the lifeboat. Both divers were taken to hospital but one was pronounced dead on arrival.

**UK Fatalities - Monthly breakdown  
from October 1999 to September 2000 incl.**



### May 2000 00/091

Two divers conducted a dive to a maximum depth of around 16m in calm conditions with very good underwater visibility. They dived from an RHIB, on a wreck, close to a rocky coastline. The wreck was broken up with no penetration opportunities. 35 mins into the dive they exchanged OK signals and shortly afterwards became separated. One of the pair searched around the wreckage for his buddy and then found himself in a narrow gully being pushed towards the cliffs by surging water. He was at a depth of 5m and surfaced. He was unable to re-descend because of buoyancy and low air supply. Another diver from the group came to assist and conducted a 7 mins search of the area. The RHIB was used to search the area and the Coastguard was notified. Two other members of the group re-kitted and entered the water to search. A helicopter also joined the search and its diver conducted a search of the wreck. A lifeboat and other craft searched the sea and a Coastguard team searched the shore. Later in the day two divers conducted an extensive circular sweep search of the wreck. Further searches were conducted the following day, but the missing diver was not found. The diver's body was recovered 4 weeks later.

### October 1999 00/015

Two divers completed a dive to a maximum depth of 14m for a duration of 28 mins, which included a stop of 1 min at 6m and a further 30 secs at 3m. At the surface they exchanged OK signals and finned away from the shotline to be recovered into the boat. A line was thrown from the boat to the divers to tow them away from some rocks, prior to recovery. During this tow, one of the divers seemed to get into difficulties and her buddy took hold of her and the line. The distressed diver was unable to climb the ladder to get back into the boat and swam towards a nearby breakwater, her buddy went with her. At the breakwater the distressed diver became unresponsive, her buddy gave the distress signal and inflated her BCD. An RHIB came to their assistance and the casualty was recovered into the boat. She was given oxygen and CPR. A Coastguard helicopter arrived and the casualty was taken to hospital. She was subsequently taken to a recompression facility for treatment and then returned to hospital. The casualty was kept on a life support machine for a number of days, but did not recover. It was subsequently revealed that this diver had suffered from a stroke.

### May 2000 00/102

Two divers conducted a dive to a maximum depth of 35m. During their return to the surface, at a depth of 20m, one of the pair signaled that she had only 80 bar of air remaining. They continued towards the surface up an incline. Shortly afterwards the other diver indicated that he was out of air and started to use the buddy's alternative air source. They started an ascent directly to the surface. At a depth of 10m the diver who was out of air moved away from his buddy and 'drifted out of view'. The buddy continued to the surface and raised the alarm. Dive duration 29 mins. The lost diver was recovered from 20m, 15 mins later, but he failed to respond to resuscitation attempts.

### November 1999 00/028

### May 2000 00/108

Two divers were conducting a wreck dive with a maximum depth of 30m. 15 mins into the dive one of the pair discovered his buddy unconscious on the wreck at a depth of 20m. He released the casualty's weightbelt and brought him to the surface. At the surface both divers were recovered into their

boat and resuscitation techniques were applied to the casualty. The Coastguard was alerted and the casualty was taken ashore in a fast boat. Resuscitation was continued, but he was pronounced dead by a doctor who met the group when it arrived at the shore. It is reported that initial post mortem results indicated that he had suffered something akin to an epileptic fit whilst underwater.

**June 2000** 00/132

The Coastguard was alerted when a diver was 15 mins overdue from a planned 50 min dive. A helicopter and lifeboats were launched to search. Divers from other dive boats organized a search of the seabed. The lost diver was found over 60 mins later in a depth of 6m. He was brought to the surface and resuscitation attempted. The diver was air lifted to hospital but failed to recover. The diver had been diving alone with one person waiting in the boat. When found the diver's equipment was separated from him on the seabed.

**June 2000** 00/134

A diver, using a closed circuit rebreather, surfaced unconscious from a wreck dive. The dive boat broadcast a 'Mayday'. The casualty was airlifted to hospital by Coastguard helicopter. The diver was certified dead at the hospital. (Coastguard & RNLi report)

**June 2000** 00/140

A group of eight divers in two boats were diving on a wreck in 48m. Two pairs were in the water when a third pair entered from a smaller boat tied astern of the main boat. The first pair returned and the fourth pair was getting ready to dive when one of the third pair resurfaced 9m away from the boat and shouted that his buddy had a problem. This diver was recovered into the small boat and reported that his buddy was unconscious at the bottom of the rope that was tying them to the wreck. One of the fourth pair went down to the wreck and conducted a search for the missing diver but returned after 9 mins without having found him. The Coastguard was alerted and the other diver was placed on oxygen as he had made a fast ascent. A helicopter and lifeboat undertook a search but without success. Police and other divers searched the wreck over subsequent days but the missing diver was not found.

**July 2000** 00/158

A group of five divers were diving on a wreck at a depth of 30m. Underwater visibility was low. 7 mins into the dive one of the group indicated that he wished to surface. The group ascended to the surface but one of the party was found to be missing. The Coastguard was alerted and a helicopter and lifeboat were launched to assist. Extensive underwater and surface searches failed to locate the missing diver.

**July 2000** 00/165

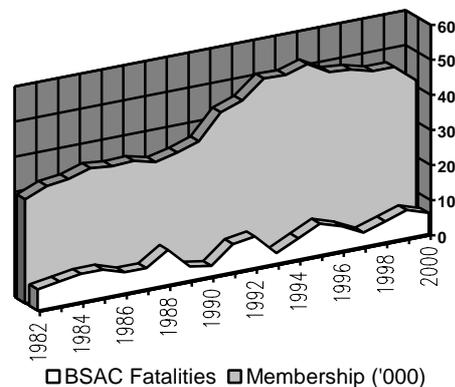
A diver was diving in a lake 200m offshore at a depth of 30m. He is believed to have had a problem with his regulator and, despite his buddy's attempts to assist, he made a rapid ascent to the surface. The buddy made a normal ascent, which included decompression stops. The diver who had made the rapid ascent was found face down at the surface. He was recovered to the shore and the emergency services were called. The diver was taken to hospital but pronounced dead on arrival.

**August 2000** 00/178

Two divers were conducting a wreck dive at a depth of 43m. One of the pair became entangled in some ropes and the second diver cut him free. The diver who had been tangled

then indicated that they should ascend. They started a normal ascent but then the diver who had signaled the ascent began to fin hard for the surface, with his buddy struggling to keep up. At 20m this diver stopped finning and sank quickly back down to the seabed with his arms flailing. The buddy followed him back down and discovered him lying on the seabed with his regulator out of his mouth and his mask half off. He tried to place a regulator into the casualty's mouth. Using a controlled buoyant lift the buddy lifted the casualty towards the surface. By this time his computer showed 17 mins decompression. At 15m he deployed a delayed SMB and put more air into the casualty's SMB, sending him to the surface. The buddy then ascended to 6m and completed a 15 min decompression stop. The casualty was recovered into the boat which then took him directly to harbour. A nearby boat was contacted by radio to collect the remaining divers. The casualty failed to recover. It is believed that the cause of death was drowning.

***BSAC Fatalities against membership 1982-2000***  
***(UK data only)***



**August 2000** 00/179

Two divers had completed a wreck dive to a maximum depth of 82m using rebreathers. They were completing their decompression stops at 6m when one of the pair suddenly spat out his mouthpiece and made a rush towards the surface. His buddy lost sight of him at 3m due to poor underwater visibility near the surface. The buddy completed his stops and surfaced. It was then discovered that the other diver was missing. An extensive search was made involving two helicopters, two lifeboats, and other craft. The diver was not found.

**August 2000** 00/214

Two divers were participating in a week long diving expedition. On the first day they conducted two successful dives to a maximum depth of 25m. On the second day a dive to a submerged reef was planned. The top of the reef was approximately 25m deep and it went down to over 60m. A shotline was deployed on the top of the reef. The shotline had a small weight running through a snap hook at the top end to tension it. The first pair dived and found the shot at a depth of 26m and little current. The second pair entered the water and dived a distance from the shotline. The third pair entered the water, one swam underwater to the line and the other drifted onto it with the current. The shot buoy was seen to 'dip' in the water and those on the boat believe that the weight had been pulled off of the reef. The boat party shouted to them to abort



the dive but were not heard. Both divers and the shot buoy left the surface together. The shot buoy did not reappear. The delayed SMB of the first pair appeared. Then a second delayed SMB appeared, this turned out to be the second pair who had found that they were off of the reef and aborted their dive. The boat maneuvered towards the second buoy and on the way one of the divers from the third pair was spotted, motionless, at the surface. This diver had his mask in place, but his regulator was out of his mouth. He was face up, but his face was underwater. Another diver entered the water from the boat and started to give AV to the casualty. A MAYDAY call was made. The casualty's BCD and drysuit were inflated but he was very heavy in the water and the rescuing diver had difficulty staying at the surface. Another diver reached from the boat and attempted to further inflate the casualty's BCD but the air vented from the overpressure valve, indicating that it was already full. The BCD and cylinder was removed from the diver and the rescuing diver took hold of it. It started to drag him under water and he released it, it then sank. This BCD had an integrated weight system. The casualty also wore a separate weightbelt. The casualty was recovered onto the boat and resuscitation was continued. No pulse could be found and oxygen assisted AV together with CPR was carried out. The diver's computer indicated a maximum depth of 62m, a dive

duration of 9 mins and a fast ascent warning. 40 mins after the recovery of the casualty a helicopter arrived and a heart monitor was used on the casualty. An inshore lifeboat arrived with a doctor. At this point the casualty was pronounced dead. An extensive search was begun for the other diver of this pair. The search was continued for many days and included helicopters, lifeboats, other craft, divers and remote controlled underwater vehicles. No trace of the missing diver was found.

## September 2000

00/242

A group of divers were diving on a wreck with depths ranging from 38 to 48m. At the end of the dive each of the divers deployed his/her own delayed SMB. They started their ascent. One of the group was seen by his buddy switching to a decompression cylinder, containing nitrox 50, at their first stop at 12m. The buddy continued to his own first stop at 6m at which point he was unable to see the diver at 12m due to water clarity. The diver who had been at 12m failed to return to the surface. A search involving a helicopter, three lifeboats and other craft continued for 2 days. The missing diver was not found.

## Decompression Incidents

**October 1999** 00/256  
 A diver made a rapid ascent due to a faulty BCD inlet valve. Her dive profile was 32.7m for 20 mins. She missed 18 mins of stops. Type 2 DCI was diagnosed and she was airlifted to DDRC for treatment. (Coastguard report).

**October 1999** 00/258  
 A diver surfaced sick and shaking after missing a stop following an 18-minute dive to 42m. He was airlifted by Coastguard helicopter to a hyperbaric unit for treatment. (Coastguard report).

**October 1999** 00/012  
 Two divers descended to a wreck in a depth of 43m. One of the divers experienced a buoyancy problem and her buddy tried to pull her down to the wreck. They came off of the wreck and ended up on the seabed. The buddy deployed a delayed SMB and they started to ascend. They lost buoyancy control during the ascent and both divers rose to the surface. The computer of one of the divers indicated missed stops at 15m. One diver complained of 'pins and needles' in his legs and he was placed on oxygen. After a further 25 mins the party arrived back at the shore and the diver reported that his 'pins and needles' had now 'totally diminished'. He declined to seek recompression advice. The other diver had no symptoms. Later their condition deteriorated and they both received recompression treatment. The diver who had had 'pins and needles' required five recompression sessions and was left with numbness in a toe and a finger and overall stiffness.

**October 1999** 00/260  
 A diver became separated from his 2 buddies during a 45-metre dive for 36 mins. He surfaced missing all stops. Given O<sub>2</sub> on dive boat and helicopter evacuation was arranged. Meanwhile, 2 buddies surfaced and all 3 were taken to a hyperbaric unit by helicopter. En-route one buddy suffered Type 1 DCI symptoms. (Coastguard report).

**October 1999** 00/259  
 A diver and buddy dived to 34m for 28 mins. One diver had buoyancy problems whilst making a 12m stop, she made a rapid ascent. Shortly afterwards she complained of shoulder pain. She was later admitted to a hyperbaric unit for treatment. This diver claimed to be PADI trained, but because PADI do not train for decompression diving, she was therefore not trained! (Coastguard report).

**October 1999** 00/007  
 A diver completed a series of ascents and descents as part of a training session. The following morning he noticed a pain in his left arm. He was referred to a recompression facility where he received treatment for a type 1 DCI.

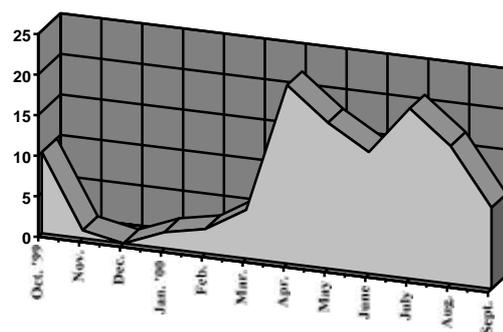
**October 1999** 00/262  
 A 70-metre dive in a quarry and missed stops resulted in a diver contracting decompression sickness. The diver and his buddy were airlifted to a hyperbaric unit. (Coastguard report).

**October 1999** 00/023

Two pairs of divers planned a dive to 50m. Once they had reached the bottom they started to explore a wreck. At this point the drysuit inflation hose of one of the divers became disconnected from his suit and began to free flow. He was unable to reconnect it and could not prevent the air loss. His buddy was also unable to resolve the problem. They made a fast ascent, disorientated by the mass of bubbles in the water. During the ascent they became separated and the diver with the free flow rose rapidly to the surface. His buddy made a more controlled ascent but elected to miss several minutes of decompression stops so that he could assist at the surface. At the surface their cover boat had to take action to avoid the diver being run down by another boat. The diver with the free flow was recovered into his boat and placed on oxygen. The diver was transferred onto a hardboat and the Coastguard alerted. The diver started to experience paralysis of his legs. A lifeboat was launched and the hardboat sailed to meet it. The diver was transferred onto the lifeboat and taken to a recompression facility for treatment. A type 2 DCI was diagnosed. This diver required subsequent recompression treatment. The buddy experienced no symptoms and was not recompressed.

**October 1999** 00/035  
 Two divers conducted a dive to 6m for 30 mins. 2 hours later they dived again to 19m for 30 mins. The following day one of the pair felt a tingling at the back of one of his knees. He sought medical advice and undertook a 5 hour recompression treatment. After this treatment the symptoms became worse. He experienced a tingling in his arms and legs, lethargy, thirst at night and physical weakness. Eight weeks later he still had these symptoms but to a lesser extent.

Decompression incidents by month



**November 1999** 00/049  
 A diver made a dive to a wreck at a depth of 38m. Visibility was poor and she became separated from her buddy. She suffered nitrogen narcosis and made a rapid ascent to the surface, missing approximately 7 mins of decompression stops. At the surface she was recovered into the boat. Her buddy surfaced 10 mins later having spent time trying to find her prior to ascending. The diver who had missed stops then developed pains in her left elbow and a tingling sensation in her left hand. She was placed on oxygen and taken ashore. Once ashore, she was taken to a recompression facility where she received

treatment.

### January 2000 00/050

A diver completed a dive to 26m for 18 mins. During the dive he had been under weighted and had collected stones from the seabed to increase his weight. At 6m, during the ascent, he lost control of his ascent rate and rose rapidly to the surface. 3 mins after surfacing this diver noticed a loss of sensation in his right hand. Once ashore an ambulance was called and a recompression facility alerted to the incident. Whilst waiting for the ambulance the diver was given nitrox 40. The diver's symptoms worsened for a while, with loss of sensation in his left leg, dizziness and some confusion, and then improved with feeling returning to arm and leg. The diver received four recompression treatments over the following two days. A full recovery was reported.

### January 2000 00/269

Two divers became entangled in rope at 54m; after freeing themselves, they ascended, missing stops. Both showed signs of DCI on the boat and were airlifted by military helicopter to a hyperbaric unit. (Coastguard report).

### February 2000 00/090

An instructor and two trainees made a dive to 18m. After 8 mins the instructor's compass malfunctioned and they surfaced to regain their bearings. They re-descended and continued with the dive. 15 mins later one of the trainees stopped to clear her mask and lost contact with the other two. She developed cramp in her leg. Visibility was very low and after looking around her she made an ascent to the surface. At the surface she regained contact with the other two and they left the water. 2 hours 15 mins later they dived again to a maximum depth of 18m for a duration of 30 mins. Later, on the journey home the diver who had become separated felt cold and had a dull ache in the center of her chest. She then began to develop 'pins and needles' in her fingers. At first this was considered to have been the effects of cold. Her journey took her to altitude and the feeling extended to the palms of her hands. The emergency services were contacted and they were met by an ambulance. She was placed on oxygen and taken to hospital. From here she was transferred to a recompression facility. During this time the 'pins and needles' progressed into her feet and ankles. She was given three sessions of recompression. The other divers experienced no symptoms.

### February 2000 00/092

A diver conducted a dive to 58m. During the dive he planned to swim through a 12m long tunnel. In the tunnel the visibility was 2m and he became disorientated and started to panic. He managed to get out of the tunnel and regain control. 15 mins of decompression stops were conducted at 3m and the total dive duration was 47 mins. 3 hours later he dived again to 35m for 32 mins as a no stop dive. 7 hours later he complained of a shoulder pain. 2 hours later he was found to have rashes and raised blotches on his back. He received 4 hours 30 mins recompression treatment. It was uncertain if this was a DCI or a strain.

### February 2000 00/272

A diver surfaced with DCI following a 27m dive for 20 mins, previous dives to 32m and 27m. He was transferred ashore by lifeboat for onward passage to a hyperbaric unit. (Coastguard & RNLI report)

### March 2000 00/071

After a dive to a maximum depth of 30m for a duration of 32

mins, two divers started their ascent. One of the pair used his delayed SMB to send the anchor to the surface and the other deployed his SMB to mark their position. During the ascent the diver with the SMB experienced problems dumping air from his drysuit through the dump valve, and lost control of his buoyancy. His buddy tried to slow his ascent but he was carried to the surface missing 14 mins of decompression stops. The Coastguard was alerted and the diver flown to a recompression facility for treatment.

### March 2000 00/273

Coastguard received a report of a diver on the shoreline with a cut head and DCI. He was taken to a hyperbaric unit by ambulance. (Coastguard report)

### March 2000 00/274

A diver made two 50m and one 25m dives for 'horrendous' times. He suffered DCI (unable to walk). Transferred to a hyperbaric unit. (Coastguard report)

### March 2000 00/278

Two divers made a rapid ascent from 31m whilst buddy breathing (one ran out of air). One diver complained of tightness of the chest and pins and needles. Both were airlifted to a hyperbaric unit. (Coastguard report).

### March 2000 00/279

A fast ascent from 12m resulted in 'pins and needles' in the hands. This diver was taken to a hyperbaric unit by ambulance. (Coastguard report).

### March 2000 00/081

A diver completed a dive to 35m for a duration of 27 mins which included 15 mins at 6m. 2 hours 30 mins later he was 6 mins into a second dive, at a depth of 6m, when he indicated a problem to his buddy. The dive was aborted and, at the surface, he felt unwell and was very cold and shaky. His condition deteriorated and he was taken to hospital. He developed paralysis in the lower half of his body and was taken to a recompression facility. He received a total of four recompression sessions and the symptoms were fully resolved.

### March 2000 00/281

A fast ascent from 50m due to an over inflated drysuit resulted in 12 minutes of missed stops. The diver was airlifted to a hyperbaric unit for treatment. (Coastguard report).

### April 2000 00/282

A 5 man dive team had been practicing decompression stops. One of the divers surfaced severely fatigued and vague. He was airlifted to a hyperbaric unit for treatment. So much for practice! (Coastguard report).

### April 2000 00/285

A diver surfaced with pains in his arms. He was airlifted to a hyperbaric unit. (Coastguard report).

### April 2000 00/284

Following a dive to 37m for 21 mins, one of a buddy pair surfaced with pins and needles. Both were airlifted to a hyperbaric unit. Only 10 bar of air from a 12 l cylinder was noted on the surface. (Coastguard report).

### April 2000 00/287

A diver made two dives, the first to 35m for 34 mins and the second to 24m for 38 mins, with a 2.5 hour surface interval. He complained of tingling in the hands and wrists and was taken to a hyperbaric unit. (Coastguard report).

April 2000 00/117

Two divers completed a dive to 26m for a total of 38 mins that included a 3 min stop at 9m and a 1 min stop at 6m. During the ascent one of the pair received an ascent speed warning from his computer which he was able to control. They had to wait to be picked up by their boat and the diver who had had the ascent warning felt nauseous once he was back in the boat. He was sick several times and felt a little better. He was cold and shivering. He took a Stugeron tablet. He began to notice a tingling in the little finger of each hand and in his cheeks. The tingling in his hands then began to spread and he was placed on oxygen. Oxygen was supplied from a diving cylinder with an octopus regulator attached. One of the second stages began to free flow. The tingling sensation spread and worsened. The Coastguard was alerted and the diver was airlifted to a recompression facility. The diver was advised not to dive for 4 to 6 weeks.

A diver completed a dive to 22m for a total duration of 34 mins, which included a 1 min stop at 6m. The following morning she had a tingling feeling in both hands and feet and she felt extremely tired. During the day she felt itchy, the tingling continued, and, that evening, she developed an ache in her elbow. The next morning the ache had gone but the tingling had increased. She contacted a recompression facility and was advised to attend for examination. She received three sessions of recompression therapy spanning three days. This diver was to be tested for a PFO.

April 2000 00/291

After surfacing from a 30m dive for 20 mins, including stops at 6m, a diver took a mouthful of salt water and began coughing up blood. He was airlifted to a hyperbaric unit for treatment. (Coastguard report).

April 2000 00/146

Three divers completed a dive to 23m for 20 mins and they planned a safety stop of 3 mins at 6m. During the ascent, at 10m, the mask of one of the divers flooded and he was unable to clear it. He felt that he was swallowing water through his regulator and swapped to his alternative air source. This felt the same and he took the alternative air source of one of the other divers. After two breaths he spat this out and, panicking, swam to the surface. On the surface he signaled distress and was recovered into the boat. He had no symptoms and was returned to the shore. During the journey he felt unwell and, once ashore, was placed on oxygen. He developed a slight pain in his neck. A Coastguard happened upon the group and arranged for a helicopter to take this diver to a recompression facility. A possible DCI was diagnosed and the diver was recompressed. His symptoms were resolved.

April 2000 00/295

Following a first dive to 58m for 35 mins, a diver surfaced from his second dive of the day to 38m for 20 mins (3 hour surface interval). Shortly afterwards he developed a skin rash and was taken to a hyperbaric unit. (Coastguard report).

April 2000 00/297

Two divers lost the shotline on a 30m wreck dive. One deployed his SMB while the other lost his weightbelt and made a rapid ascent. He surfaced with pains in the knees and was airlifted to a hyperbaric unit. (Coastguard report).

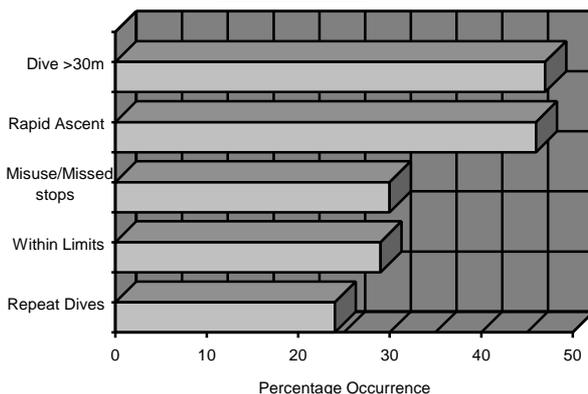
April 2000 00/116

Two divers completed a dive to 36m for a total of 32 mins, including a 2 mins stop at 6m. 20 mins after surfacing one of the pair started to lose feeling in his legs. A DCI was diagnosed and the diver was given recompression treatment. Subsequently he was detained overnight, in hospital, for observation.

April 2000 00/115

A pair of divers was at a depth of 16m when one of them experienced a problem with her regulator. She made a fast ascent to the surface, her buddy stayed underwater. 5 mins later she re-descended and they dived to 20m. At this point she experienced a regulator free flow and made another rapid ascent. The buddy surfaced a few minutes later. 45 mins later she noticed rashes on her hands, arms and chest. A skin bend was diagnosed and the diver was given recompression treatment that resolved the problem. She was taken to hospital and discharged later that day.

**Percentage analysis of factors involved in cases of DCI**



April 2000 00/220

Three divers conducted a 26 min dive to a depth of 17m. During the descent one of the group experienced a sinus problem. During the dive they conducted controlled buoyant lift and mask and regulator clearing drills. Once back in the boat, the diver with the sinus problem complained of a headache. Later that day he reported feeling fatigued, generally unwell and still had a headache. Medical advice was sought and a neurological bend was diagnosed. The diver was successfully recompressed.

April 2000 00/289

A dive to 45m for 25 mins with no stops lead a diver to suffer tingling sensations in the arms and fingers. He was taken ashore by his boat and transferred by ambulance to a hyperbaric unit. (Coastguard report).

April 2000 00/290

A rapid ascent from 25m caused a spinal bend. The diver was airlifted to a hyperbaric unit for treatment. (Coastguard report).

April 2000 00/127



April 2000 00/100

Two divers conducted a dive to 22m. During the dive one of the pair felt that her breathing was laboured and switch the venturi control of her regulator to a more sensitive setting. This diver was using two cylinders with independent regulators and she switched to the other cylinder after 18 mins. After 22 mins they prepared to ascend, and she used the now spare regulator to inflate a delayed SMB. Because the switch was still in the sensitive position, the regulator began to free flow and could not be stopped. Whilst trying to resolve this problem the diver became buoyant and was unable to prevent herself being carried rapidly to the surface. The buddy made a normal ascent. On the boat the diver breathed nitrox 36 for 1 hour. No symptoms were present. The following day she was aware of numbness and tingling in her left arm. She sought medical advice and was referred from hospital to a recompression facility.

April 2000 00/101

A diver completed a dive to 29m for 26 mins with a 2 min stop at 6m. 2 hours 45 mins she dived again to 23m. The second dive was a drift dive. During this dive the diver encountered an up current and was carried from 16m to the surface in less than 1 min. Back in the boat she breathed oxygen as a precaution. 20 mins later she noticed numbness in her left hand and a tingling and weakness in her right hand. She was taken by ambulance to hospital and then to a recompression facility. She received a 5 hour treatment and her symptoms fully resolved.

April 2000 00/303

A diver who made a fast ascent was taken direct to a hyperbaric unit by her club. Her buddy was also treated as a precaution. (Coastguard report).

April 2000 00/302

Once ashore from a dive, a diver suffered pains in his shoulders. Following medical advice, he was airlifted to a hyperbaric unit. (Coastguard report).

April 2000 00/184

Two divers were conducting a dive to a maximum depth of 18m. At 14m one of the pair began to feel dizzy and felt that she was in danger of blacking out. She held on to a rock and her buddy came to assist. The buddy brought her to the surface using a controlled buoyant lift and they were recovered into their boat. The diver then complained of blurred and double vision. She was given oxygen and the boat returned to shore from where the emergency services were contacted by mobile phone. When the ambulance crew arrived the diver was unable to move and losing the ability to speak. A doctor examined the casualty and a helicopter was summoned to take her to a recompression facility for treatment. The buddy experienced no adverse effects.

April 2000 00/306

Four deep dives in 2 days with inadequate stops, resulted in a diver suffering chest pains. He was airlifted to a hyperbaric unit for treatment. (Coastguard & RNLI report)

April 2000 00/128

A diver completed a dive to 11m for 32 mins. 4 hours 20 mins later she undertook a drift dive to a maximum depth of 12m. Once back in the boat she noticed 'pins and needles' in her left leg and foot. The sensation then started in her right leg and foot and in her hands. She was placed on oxygen and the boat

returned to the shore. The diver was taken to a recompression facility. A PFO test was planned.

May 2000 00/308

A diver surfaced from a 52m dive, missing stops, after getting tangled in his buddy's SMB. He was airlifted to a hyperbaric unit suffering from pains in his elbow. (Coastguard report).

May 2000 00/307

A wreck diver surfaced with DCI. The diver was transferred to a hyperbaric unit. (Coastguard report).

May 2000 00/105

A diver completed a dive to 11m for 35 mins with a 2 min stop at 6m. 1 hour 40 mins later he dived again to 26m for 33 mins with a 4 min stop at 6m. 6 weeks earlier the diver had suffered from a bad attack of flu. The afternoon after the dive he noticed a tingling in his left hand. The following night he experienced severe stomach cramps. The following day his left hand was tingling and numb. The next day it had spread up his arm and he noticed symptoms in his right hand. He sought medical advice and received two sessions of recompression treatment that fully resolved his symptoms.

May 2000 00/311

A diver made a rapid ascent and surfaced in a poor condition, described as vomiting, blood from the nose then not breathing. He was airlifted to hospital and then to a hyperbaric unit where he was treated for a burst lung. His buddy was later treated in hospital. (Coastguard report).

May 2000 00/313

The second dive of the day to 15m ended with a rapid ascent and severe headache. The diver was airlifted to a hyperbaric unit. (Coastguard report).

May 2000 00/107

A dive to 25.1m for 27 mins ended in a rapid ascent from 15m. The diver suffered tingling and joint pain. He was airlifted to a hyperbaric unit. (Coastguard report)

May 2000 00/145

A diver completed a dive to 22m for a duration of 35 mins including a 1 min stop at 6m. That evening he noticed an area of irritation on his left forearm. The following morning a blotchy red rash had appeared and he contacted a recompression facility. Three skin bends were noted and he was recompressed. This resolved all but one of the problems. The remaining rash finally disappeared 10 days later.

May 2000 00/118

Two divers completed a dive to 30m for a total duration of 34 mins. 6 hours 30 mins later they dived again to 29m for 29 mins including a 5 min stop at 6m. The afternoon of the following day one of the pair experienced shoulder pains. This was initially thought to be muscular but the condition worsened overnight. Medical advice was sought and both divers were examined. The diver with symptoms was recompressed but this did not resolve the problem. It was concluded that either the problem was muscular or that too long had passed before treatment was given.

May 2000

00/155

Three divers undertook a dive to a maximum depth of 27m. All of these divers were using twin cylinders. One of the group had twin 10l cylinders one with 80 bar and the other with 160 bar. After about 25 mins this diver used the last of the air in one of his cylinders to send a lifting bag to the surface and started to breathe off the other cylinder. At 28 mins his second cylinder ran out and he switched to his 3l pony cylinder. At this point his computer indicated a 4 min stop at 3m. At 29 mins they started their ascent. At 8m this diver ran out of air. He signaled that he was out of air to his two buddies, who were 4m below him. He re-descended to his buddies and took the spare regulator from one of them. A 5 min stop was now indicated. At this point buoyancy control was lost and both divers were carried to the surface. The computer of the diver who had run out of air indicated that 12 mins of decompression stops had been missed; the other diver had missed 6 mins of stops. The third diver completed his stops. The diver who had run out of air was placed on oxygen and the boat returned to the shore. 20 mins after the oxygen was finished the diver noted a tingling sensation on the top of his left hand. Medical advice was sought and a spinal DCI was diagnosed. The diver received two sessions of recompression treatment that resolved his symptoms. No symptoms were reported by the other divers and they were not recompressed.

May 2000

00/314

A diver surfaced with suspected DCI, he was conveyed to a hyperbaric unit once the dive vessel docked. (Coastguard report).

May 2000

00/315

Portland Coastguard received a mayday broadcast. A diver had surfaced from a 34m dive for 25 minutes and was paralyzed on one side. He was airlifted to a hyperbaric unit by Coastguard Helicopter. (Coastguard report).

May 2000

00/316

A diver had dived a total of 5 dives to 23m (max) in 6 hours. The result of his endeavours was back, shoulder and hip pain plus tingling in the hands and forearm. He was taken by lifeboat to a hyperbaric unit. (Coastguard report).

May 2000

00/317

A diver surfaced with suspected decompression sickness. She was taken to hospital by ambulance. (Coastguard report).

May 2000

00/130

A diver dived to 52m for 19 mins. He stopped at 20m for 4 mins but missed the other stops. He was airlifted to a hyperbaric unit for precautionary treatment. (Coastguard report)

May 2000

00/323

Two divers dived to 36m for 37 mins. They made a fast ascent from 17m. One suffered decompression sickness and was airlifted to a hyperbaric unit. The buddy was later taken to the unit by car. (Coastguard report).

May 2000

00/320

A diver dived to 36m but missed a stop at 3m. He surfaced with pain to his shoulder so he was taken to a hyperbaric unit by lifeboat. (Coastguard & RNLI report)

May 2000

00/141

A pair of divers conducted a dive to a maximum depth of 36m. 30 mins into the dive they were on an underwater rock wall at a depth of 22m. At this point one of the divers was too buoyant and struggled to dump air from his BCD. His buddy attempted to assist and saw air leaving the jacket. The buoyant diver was carried upwards and his buddy hung on attempting to dump air from his own BCD. At 9m the second diver saw that his computer indicated that a 4 min stop was required and he released the buoyant diver, who was carried to the surface. The second diver descended to 18m and then re-ascended to 6m to complete his stops. He could see the buoyant diver hanging on to the SMB at the surface. At the surface both divers then swam to the boat and climbed aboard. The buoyant diver had no symptoms. Oxygen was available but its use was discouraged, by the skipper, because of the inconvenience of getting it refilled. The following day the buoyant diver experienced mild symptoms of DCI and was recompressed.

May 2000

00/325

A diver with DCI was transferred to a hyperbaric unit by lifeboat. (Coastguard report).

June 2000

00/150

A diver was 20 mins into a dive at a depth of 37m. He became separated from his buddy in poor visibility and got tangled in some line. He cut himself free and made a rapid ascent to the surface. At the surface he showed symptoms of DCI and the Coastguard was alerted. A lifeboat and helicopter were tasked to assist and he was given oxygen and flown to a recompression facility for treatment. (Newspaper report only)

June 2000

00/157

Two divers conducted a dive to a maximum depth of 37m and were ascending when one of the pair became inverted. The other diver went to assist him and, despite trying to make himself heavy, was unable to prevent them from being carried to the surface. The dive had been a 'no stop' dive but they went from 28m to the surface in less than 1 min. The divers were recovered into the boat and the inverted diver placed on oxygen. Another boat from the same party came to assist and the buddy was also placed on oxygen. The buddy noticed a tingling and numbness in his fingers and forearm. The Coastguard was alerted and the boats returned to shore to be met by an ambulance. The buddy's symptoms worsened; he developed a dull ache in his shoulder. They were taken to a recompression facility and examined. The buddy had reduced power in his limbs, felt somewhat confused, and had poor balance. Both divers were given two recompression treatments, and the buddy required a further three days of treatment. This diver was left with residual symptoms of extreme tiredness and short-term memory loss. A spinal and cerebral DCI was diagnosed.

June 2000

00/139

Three divers conducted a dive to 19m. At the end of the dive they deployed a delayed SMB. The reel jammed and the diver holding it was dragged upwards. The dive leader grabbed hold of this diver and attempted to stop the ascent. In the confusion the dive leader's glove fouled the reel lanyard and both were dragged up to 3m within 1 min. The dive leader got no response to her signals to the other diver and decided to ascend to the surface. Total dive time was 31 mins. The third diver made a normal ascent. 4 mins of decompression were missed. The divers who had made the rapid ascent were placed on oxygen and one of them complained of 'pins and needles'. The boat's radio was found to be malfunctioning so

they returned rapidly to the shore and then contacted the Coastguard. Both divers were taken by helicopter to a recompression facility where the diver with symptoms was recompressed. Both divers fully recovered. The diver using the reel was unfamiliar with it and the trigger of the reel could jamb on the ratchet if depressed too far. The radio malfunction was traced to a faulty microphone.

June 2000 00/331

A 22m dive for 21 mins on the James Egan Layne was spoilt by a rapid ascent and subsequent chest pains. The diver was airlifted to a hyperbaric unit. (Coastguard report).

June 2000 00/332

A diver made a rapid ascent and suffered nausea and tingling of the extremities. He was taken to hospital, where he was later airlifted to a hyperbaric unit. (Coastguard report).

June 2000 00/148

A diver suffering from a suspected DCI was airlifted to a recompression facility for treatment. (Newspaper report only)

June 2000 00/335

A diver made a rapid ascent from 25m after she became tangled in a SMB. She surfaced feeling sick, dizzy and with tingling hands. She was airlifted to a hyperbaric unit. (Coastguard report).

June 2000 00/336

A diver dived to a depth of 23m for 25 mins. He made a normal ascent to 6m for a decompression stop, but his air ran out. His reserve air failed to function so he made a rapid ascent. This resulted in dizziness and general malaise, so he was airlifted to a hyperbaric unit. (Coastguard report).

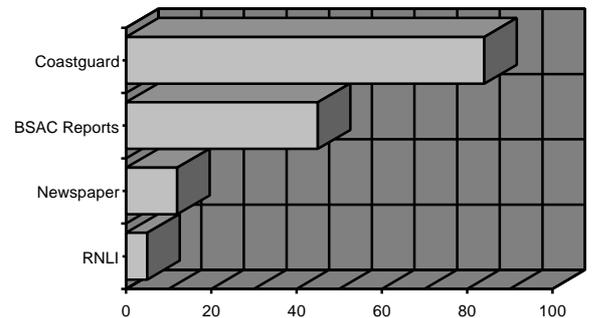
June 2000 00/171

Two divers conducted a wreck dive in a maximum depth of 34m. Both divers were using nitrox 32. After 20 mins they prepared to ascend. They attempted to deploy a delayed SMB but it became detached from the line. They attached a second SMB and released it. The reel then jammed and started to drag the diver holding it to the surface. This diver was reluctant to release the reel as they planned to conduct decompression, and she also hoped that it would become free. Her buddy took hold of her to try to prevent an uncontrolled ascent, but was also carried up. At 20m the buddy let go and made a normal ascent that included a 3 min stop at 6m. The diver with the reel was carried directly to the surface. She was recovered into the boat and placed on oxygen. The Coastguard was alerted and the casualty was taken by helicopter to a recompression facility for treatment.

June 2000 00/153

A diver suffering from DCI was given recompression treatment. (Newspaper report only).

**Decompression data source analysis**



June 2000 00/194

A diver completed a dive to 48m. He started his ascent after 20 mins. He stopped for 10 mins between 14 and 6m and then for 30 mins at 5m. He completed 3 mins more decompression than indicated by his computer and 8 mins longer than indicated by his buddy's computer. At the surface he experienced extreme fatigue and rested for the remainder of the day. 5 to 6 hours after the dive his legs became numb and he attended hospital where he was placed on oxygen for 4 hours; this resolved his symptoms. The following evening he lost all feeling in his right foot. He contacted a recompression facility and received two sessions of treatment. His buddy, who had decompressed on nitrox, exhibited no symptoms.

June 2000 00/343

A diver surfaced after a 66m dive and suffered visual disturbances. She was airlifted to a hyperbaric unit for treatment. (Coastguard report).

June 2000 00/347

After completing a normal dive to 32m for 32 mins (with a 4 min stop at 6m), a diver developed slurred speech and dizziness some 10 mins later. She was airlifted by Coastguard helicopter to a hyperbaric unit. (Coastguard report).

June 2000 00/195

A diver made a dive to 36m for a duration of 32 mins including 5 mins of decompression stops at 3m. 3 hours later he dived again to 30m for a total of 25 mins. An indicated stop of 1 min at 3m had cleared by the time he had ascended to 20m. A few hours later he experienced a mild ache in his upper right arm. The condition worsened during the night and he contacted a recompression facility early the next morning. He received four sessions of recompression treatment that fully resolved his symptoms.

July 2000 00/356

The same dive charter vessel as in DTG 021101 (00/354) had a third casualty of the morning when a diver surfaced from a 29.1m/10 min dive, with a skin bend and tingling sensations. He was airlifted to a hyperbaric unit as well. (Coastguard report).

July 2000 00/354

A diver dived to 28m for 8 mins and then panicked as she claimed she could not breathe. Despite her buddy's attempts to control the ascent, both made a rapid ascent and displayed

signs of DCI. Both were airlifted to a hyperbaric unit. (Coastguard report).

July 2000 00/167

A diver was 15 mins into a trimix dive, at a depth of 87m. At this point the zip of his drysuit failed and water entered the suit. The diver had planned for 20 mins bottom time with an overall dive time of 127 mins. Realizing that he would not be able to survive the cold for long he made an ascent up the shotline. At 41m he stopped for 1 min and switched to nitrox 37. He stopped at 36m for 1 min and then at 33m for a further minute. He stopped at 20m for 2 mins and again at 16m for 2 mins. He switched to nitrox 80 and made stops at 12 and 6m. At the surface he was recovered into the boat and assisted out of his drysuit. He changed into warm clothes and then collapsed, passing in and out of consciousness. The Coastguard was alerted and a lifeboat and helicopter were launched to assist. The casualty was transferred into the lifeboat and then airlifted. The helicopter stopped on its way to a recompression facility to collect a doctor. The diver had to be taken further than normal because the closest recompression facility was occupied as the result of an earlier diving incident. The casualty spent 4 days in the recompression chamber and made a good recovery.

July 2000 00/230

A diver completed a series of three dives; 10m for 26 mins, 36m for 27 mins, and 14m for 27 mins. 6 to 7 hours later he felt a pain in his back and neck and some tingling in his hands. He sought medical advice and received recompression treatment. This resolved his symptoms.

July 2000 00/173

Two divers suffered symptoms of DCI having surfaced missing 10 mins of decompression stops. They were airlifted to a recompression facility. Both divers were recompressed. One of the pair required a further session of treatment. It is reported that they were out of air.

July 2000 00/361

A rapid ascent from a 37m/25 min dive resulted in a 'pins and needles' sensation in the hands. This diver and his buddy were taken to hospital by ambulance. (Coastguard report).

July 2000 00/221

Two divers conducted a wreck dive to a maximum depth of 51m. One of the pair had forgotten his computer and so borrowed a set of IANTD tables. Prior to the dive he forgot to connect his drysuit direct feed and to put on his weightbelt. During the descent, at 18m, he suffered from suit squeeze and his buddy connected the direct feed hose. At the bottom he put a rock in his drysuit pocket to compensate for the missing weightbelt. After 20 mins at a depth of 44m he deployed a delayed SMB. In doing so he lost the rock from his pocket and started to ascend uncontrollably with his buddy. The buddy took the SMB reel, swam back down to the wreck and tied the reel to the wreck. This allowed them to control their ascent. They took 4 mins to get to 12m. At 12m the buoyant diver let go of the line to switch to a nitrox 80 decompression gas. He was carried to the surface. The buddy deployed his delayed SMB and completed 41 mins of stops as indicated by his computer. Total dive time 72 mins. The buoyant diver was recovered into the boat. He breathed nitrox 80 until oxygen was made ready, he then breathed oxygen. He complained of a pain in his right elbow. The Coastguard was contacted and the diver airlifted to a recompression facility for treatment. No subsequent ill effects were experienced.

July 2000 00/243

A pair of divers completed a 21 min dive to a depth of 43m, including a 2 mins decompression stop at 3m. Shortly after surfacing one of the pair experienced a severe stomach pain and was placed on oxygen. The Coastguard was alerted and they were advised to monitor the casualty. 5 mins later he started to develop 'pins and needles' in his feet and a lack of feeling in his legs. The Coastguard was contacted again and the casualty and his buddy were airlifted to a recompression facility. The casualty received a 7 hour recompression treatment. The buddy showed no symptoms of DCI and was not recompressed. He was, however, treated for a sprained ankle which he sustained when jumping from the helicopter.

July 2000 00/365

Three dives the previous day, two to 30m and one to 17m, plus a 32m dive the next day, led to numbness and weakness in the legs. This diver was admitted to a hyperbaric unit for treatment. (Coastguard report).

July 2000 00/367

The Coastguard was called on VHF radio by a commercial dive boat reporting a diver with suspected DCI. A lifeboat transferred the casualty ashore for onward passage to a hyperbaric unit. (Coastguard & RNLI report)

July 2000 00/202

A diver completed a dive to 7m for 12 mins. 20 mins later she dived again to 8m for 17 mins. 90 mins after the second dive she experienced a tingling in the fingers of her left hand. A few hours later the symptoms remained and she sought medical advice. DCI was considered improbable but she received two sessions of recompression treatment. Some residual tingling remained and further medical examination was planned. This diver had suffered a DCI 3 months earlier (Report 00/100). A 6 week lay off from diving had been recommended. These were the first dives since the earlier DCI incident.

July 2000 00/368

A diver made a rapid ascent from a 34.6m/41 min dive. He complained of difficulty breathing, pain in the chest and a 'bubbling' sensation in the lungs. He was met ashore by an ambulance and taken to hospital and then onwards to a hyperbaric unit. (Coastguard report).

July 2000 00/370

This diver had made 3 dives on this day, the previous 2 to 12m and the third to 15m. He made a rapid ascent, and later developed joint pain and pins and needles. He was admitted to a hyperbaric unit for treatment. (Coastguard report).

July 2000 00/371

A rapid ascent from 22m caused this diver to lose consciousness on the surface. He regained consciousness and complained of severe head pain. He was airlifted to a hyperbaric unit for treatment. It is alleged that this diver was awaiting surgery for a heart complaint, and his neck seal on his new drysuit was far too tight. (Coastguard report).

July 2000 00/217

Three divers all reported suffering from vomiting, headache and tingling sensations following a dive (profile unknown). They were airlifted to a hyperbaric unit. (Coastguard report)

July 2000 00/237

Three divers commenced a dive to a maximum depth of 22m. Some time into the dive they entered an area of fast moving water between two rock formations. Realizing that they had moved into a current one of the divers deployed a delayed SMB. The SMB caused this diver to move at a different speed and he was carried away from the others. This single diver made a safe ascent to the surface and was recovered into a boat. The two remaining divers were carried down to 22m and then, despite their efforts to regain control, were swept up to the surface in 40 seconds. At the surface one of the divers was briefly unconscious and her buddy inflated her BCD. They were recovered into their boat. The diver who had been unconscious had a severe headache, and the other had slight 'pins and needles'. Both divers were given oxygen and they were taken ashore. The Coastguard was alerted and two ambulances and two helicopters arrived. All three divers were taken to hospital. After examination two were released but the diver with the headache was taken on to a recompression facility where she received treatment for 5 hours.

### July 2000 00/375

A diver surfaced from a 48m dive and had missed all stops. He suffered pains in the elbow. Whilst the Coastguard helicopter was en-route, another diver surfaced and reported missing 15 mins of stops from his 47m dive. Both divers were airlifted to a hyperbaric unit for treatment. (Coastguard report).

### July 2000 00/379

A 75m tri-mix wreck dive for 25 mins ended with a free ascent and missed stops. The diver surfaced, but had lapsed into semiconsciousness after 10 mins. He was evacuated to a hyperbaric unit by RN helicopter. (Coastguard report).

### July 2000 00/378

A diver with DCI was airlifted to a mainland hyperbaric unit by Coastguard helicopter. (Coastguard report).

### July 2000 00/216

Two divers suffering from DCI were airlifted to a recompression facility for treatment. (Newspaper report only)

### July 2000 00/380

A diver with suspected DCI on St Kilda was airlifted, by Coastguard helicopter, to a mainland hyperbaric unit for treatment. (Coastguard report).

### August 2000 00/222

A diver completed a dive to 30m for 30 mins, including a 1 min safety stop at 6m. 1 hour 49 mins later he dived again to 24m for 30 mins including a 1 min safety stop at 6m. 1 hour after the second dive he began to feel a cramp like pain across his abdomen. He then developed a numbness and tingling in his upper left leg, the sole of his left foot and his toes. He was placed on oxygen. After 10 mins the symptoms had diminished. The boat headed back to the shore and the Coastguard was alerted. Medical advice was provided by radio and the oxygen administration was stopped. On arrival on shore all symptoms had resolved. The diver was monitored for further symptoms and none were experienced.

### August 2000 00/387

Type 2 DCI struck 5 mins after surfacing from the second dive of the day. This diver, and his buddy (who was OK, but had the same dive profile) were airlifted to a hyperbaric unit. His first dive was to 36m for 60 mins and the second dive to 27m for 25 mins (incl. stops). (Coastguard report).

### August 2000 00/384

A diver with DCI was transferred ashore by two lifeboats in a relay and taken to a hyperbaric unit. (Coastguard report).

### August 2000 00/209

A diver using nitrox 27 conducted a dive to a maximum depth of 44m. After 10 mins, at 35m, he deployed a delayed SMB. A 1 min stop was conducted at 20m, followed by a 4 min stop at 6m on nitrox 53. He surfaced with a total dive duration of 20 mins. On surfacing he felt unwell and dizzy. He was placed on oxygen. 20 mins later he was still feeling unwell, dizzy and tired. The Coastguard was alerted and the casualty taken by helicopter to a recompression facility. He received a 6 hour treatment which resolved his symptoms.

### August 2000 00/236

Two divers conducted a dive to a maximum depth of 30m. They started their ascent after 26 mins. They arrived at 6m after 27 mins, where they conducted a 4 min decompression stop. Their total dive time was just over 32 mins. 6 hours later one of the pair noted a pain in his right triceps. The following morning the pain had gone but it returned within 1 hour. He sought medical advice and attended a recompression facility. He was recompressed and this resolved the symptom.

### August 2000 00/390

A dive to 24m for 37 mins resulted in a diver seeking medical attention after a 'pins and needles' sensation in the forearm was felt the next day. (Coastguard report).

### August 2000 00/226

A diver conducted a dive to 29m for a duration of 30 mins which included a 3 min decompression stop at 6m. Later this diver complained of fatigue, dizziness, and pains in his shoulder, elbow and ankle. He was placed on oxygen and the Coastguard alerted. He was transported by lifeboat to a recompression facility where he received a 6 hour treatment. He responded well to the treatment and was kept in hospital overnight for monitoring.

### August 2000 00/392

4 dives in 2 days (depths unknown but reported not excessive) with a rapid ascent on the last dive led to a neurological embolism and evacuation to a hyperbaric unit. (Coastguard report).

### August 2000 00/213

Two divers were ascending from a 33m dive. They planned a first decompression stop at 9m. At 9m one of the pair lost control of his buoyancy and ascended rapidly to the surface. At the surface he was given his buddy's pony regulator from which he breathed nitrox 40. He was recovered onto the boat and placed on oxygen. 9 mins of decompression stops had been missed. The diver had a pain in his elbow. He got out of his diving suit and went to lay down in a cabin. A recompression facility was contacted by phone for advice. The diver developed a back pain. The boat returned to harbour and the diver was taken to the recompression facility. Tests were inconclusive and the diver was recompressed. This treatment resolved his symptoms. He was given a check up the following day, no further treatment was required.

### August 2000 00/212

Two divers were ascending from a dive to 17m. At 11m one of the pair felt buoyant and dumped air from her BCD. She was still buoyant and attempted to dump air from her drysuit. The

dump valve would not allow air to be released and the diver made a rapid ascent to the surface. Her buddy made a normal ascent. At the surface the diver was towed ashore. 30 mins later this diver experienced a tingling in her fingers. 1 hour later she felt dizzy and had pain in her knees and elbow. She attended her local casualty department. After a 40 min wait she was placed on oxygen and given a chest x-ray. She was then sent by ambulance to a recompression facility where she received treatment. A full recovery was reported.

**August 2000** 00/232  
A 70 year old diver surfaced from a 25m, 36 min dive. He felt unwell with tingling in his extremities and was airlifted to a hyperbaric unit. (Coastguard report)

**August 2000** 00/228  
A diver completed a 31 min dive to 31m including a 4 min stop at 6m. 1 hour 22 mins later she dived again. At the start of this second dive her buddy suffered a drysuit leak at 6m and they returned to the surface. They then dived to 11m and after 22 mins they started to ascend. The buddy was unable to control his drysuit buoyancy and became inverted. The first diver attempted to help and they ascended quickly to the surface. 1 hour after the dive the first diver noted a numb feeling in her right hand, fingers and toes. 5 days later the condition remained and she was advised to seek medical help. She attended hospital and was placed on oxygen which alleviated the symptoms. She was then taken by air ambulance to a recompression facility where she received a 5 hour treatment.

**August 2000** 00/394  
A 59 yr old diver with DCI was airlifted to a hyperbaric unit for treatment. (Coastguard report).

**August 2000** 00/397  
A 38m dive for 23 mins resulted in this diver suffering from arm pains. He was evacuated to a hyperbaric unit for treatment. (Coastguard report).

**August 2000** 00/211  
A diver conducted a dive to 37m for 30 mins. He developed a numbness in his lower body. He was placed on oxygen and the Coastguard alerted. Once ashore he was taken by ambulance to a helicopter and airlifted to a recompression facility. (Coastguard report).

**August 2000** 00/399  
A rapid ascent from 54m following a bottom time of 30 mins resulted in DCI and evacuation to a hyperbaric unit. (Coastguard report).

**August 2000** 00/233  
Two divers conducted a dive to 27m. They left the bottom after 29 mins and made a slow ascent conducting a 5 min stop at 5m of which 3 mins was a safety stop. They surfaced with a total dive time of 43 mins. 40 to 60 mins after the dive, one of the pair noted a small rash on her arm. Medical advice was sought and the diver was recompressed. After 20 mins the symptom had resolved. This diver had suffered a skin bend 3 years earlier.

**August 2000** 00/400  
A diver had completed a 60m dive for 20 mins, making a series of stops. The casualty had been out of the water for 2 hours before he suffered shortness of breath, dizziness and vomiting.

He was airlifted to a hyperbaric unit for treatment. (Coastguard report).

**September 2000** 00/406  
A rapid ascent from 31m resulted in DCI. The diver was transferred to a hyperbaric unit by ambulance. (Coastguard report).

**September 2000** 00/407  
Following a weeks diving holiday, this diver reported being unwell. She was transported to a hyperbaric unit for treatment. (Coastguard report).

**September 2000** 00/246  
A diver completed a 33 min dive to a depth of 29m with a 6 min stop at 6m. 2 hours 41 mins later he dived again to 27m for 37 mins with a 4 min stop at 6m including an additional 2 min safety stop. On climbing back into the boat he felt a pain in his back. He had a history of back pain, however this was worse than experienced before. He sought medical advice and took painkillers. The following day the condition was unchanged and he sought further medical advice. A weakness was found in his left leg and he received two sessions of recompression treatment. The treatment was effective for the leg weakness but did not resolve the back pain. This diver had had a DCI 20 years earlier.

**September 2000** 00/409  
Following 4 dives in the previous 30 hours, this diver developed a skin bend after a fast ascent from a 21m dive. He was airlifted to a hyperbaric unit for treatment. (Coastguard report).

**September 2000** 00/411  
A diver reported feeling unwell with blurred vision as a result of a 30m dive the previous day. She was taken to a hyperbaric unit by ambulance. (Coastguard report).

**September 2000** 00/414  
A diver completed all stops correctly following a dive, but experienced tingling extremities and a prickling sensation to her skin. She was airlifted to a hyperbaric unit for treatment. (Coastguard report).

**September 2000** 00/252  
A diver completed a dive to 35m for 50 mins including a 7 min stop at 6m. 4 hours 20 mins later he dived again, this time to 25m for 42 mins with a 3 min stop at 6m. Early the following morning he awoke with a pain from his shoulder to his elbow. He sought medical advice and was successfully recompressed.

**September 2000** 00/418  
A missed stop following a 52m dive for 50 mins resulted in this diver suffering from blurred vision and tingling in the hands. He was taken by lifeboat to a hyperbaric unit for treatment. (Coastguard report).

**September 2000** 00/417  
A 22metre/25 min dive was immediately followed by a 52m/10 min dive. The diver suffered DCI and was transferred to a hyperbaric unit by lifeboat. (Coastguard report).

**September 2000** 00/251  
A diver made a normal ascent from 35m but suffered discomfort in his stomach and leg. The dive boat brought him ashore where a hyperbaric unit ambulance met him.



(Coastguard report)

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## Injury / Illness

October 1999 00/005  
After a dive to 30m for 40 mins a diver suffered fatigue, headache and stress. He was sent to hospital as a precaution.

October 1999 00/004  
A trainee had completed a 20 mins pool training session to a maximum depth of 3m. She left the pool by a ladder and was seated being de-briefed when she lapsed into unconsciousness. She was wrapped in towels and a space blanket and an ambulance was called. The casualty fluctuated between a conscious and a semiconscious state. She was confused, felt numb and had difficulty focusing her eyes. In hospital acute malnutrition was diagnosed. It was subsequently learned that the casualty had not eaten for 15 hours, had completed a 12 hour working shift, and had had polio and yellow fever injections prior to the pool session.

October 1999 00/014  
Two divers dived to a wreck at a depth of 15m. One of the two was using a drysuit which she thought had a loose neck seal. Once underwater, this diver also discovered that she was over weighted. During the ascent she was unable to use the buoyancy of her suit since the air escaped through the neck seal. She used her BCD and this started a rapid ascent. Her buddy took hold of her and dumped the air from her BCD, this caused them both to sink back to the seabed. The buddy suffered a burst eardrum during this descent since he did not have a hand free to clear his ears. They then made an ascent to 6m and conducted a 3 mins safety stop. Both divers arrived safely at the surface and the injured diver went to hospital.

October 1999 00/008  
A trainee was ascending from a depth of 34m after a dive of 10 mins. On the way up she spat her regulator out. The instructor brought her to the surface, where she was assisted by a third diver. The diver was recovered from the water and given oxygen. She was briefly unconscious but quickly recovered. She was taken to hospital but discharged after 3 hours. No further ill effects were reported.

October 1999 00/022  
A trainee completed a dive to 15m for 30 mins. One hour later she started a second dive. At 3m she experienced a problem with her ears. Trainee and instructor surfaced and she complained of a pain in her left ear. The following day she underwent a medical examination and it was discovered that she had a perforated eardrum. The trainee was recovering from a cold at the time of the dive.

November 1999 00/045  
Two divers began a night dive. At a depth of 18m one of the pair blacked out. Her buddy grabbed hold of another diver close by. This third diver brought the casualty to the surface; on the way up the casualty's regulator fell from her mouth. She was recovered from the water and found to be shaken but unhurt. She then revealed that she had a history of mild epilepsy.

December 1999 00/042  
A trainee diver was 1 min into a dive at a depth of 6m when she panicked. She returned to the surface. She was shaky and cold and complained of chest pains. An ambulance was called, but it

was decided that she did not need to go to hospital. The diver was unable to explain what had caused the problem.

December 1999 00/043  
Three divers dived to 32m. At this depth one of the group started to shake uncontrollably. One of the others saw the problem and brought her to the surface using a controlled buoyant lift. All three surfaced safely and there were no subsequent ill effects. It is believed that the problem was due to nitrogen narcosis.

December 1999 00/054  
A diver was under instruction using a rebreather. At 22m, 31 mins into the dive, this diver started to convulse. The instructor brought him to the surface. The convulsions continued. The diver was taken to hospital and discharged later that day. It is thought that there was a problem with oxygen readings on the rebreather.

February 2000 00/074  
After a normal dive to a maximum depth of 22m for 26 mins, a diver reported that he had had a minor pain in his neck during the dive and that he was suffering from 'pins and needles' in his neck and spine. He was checked for DCI at the time and one hour later. No problems were identified.

March 2000 00/076  
Two divers ascended after a 25 min dive to 15m. At the surface one of the pair felt his ear 'pop'. He is believed to have damaged his ear.

March 2000 00/070  
A diver conducted a controlled buoyant lift as part of his training programme. The diver acting as the casualty was wearing a drysuit with a cuff dump. The lift was conducted with her BCD and no air was dumped from the suit. The 'casualty' attempted to dump air from the cuff dump but none escaped. They made a fast ascent from 23 to 13m where the ascent slowed. Control was lost again at 10m and the divers made a buoyant ascent to the surface. 1 hour 12 mins later the diver who had been acting as the casualty dived again. She spent 10 mins at 20m, 10 mins at 10m and 8 mins at 6m. On surfacing she reported a burning sensation in her fingers and 'pins and needles'. 50 mins later half of her right hand was numb and tingling. She was given oxygen and medical advice was sought. They were advised to keep the casualty warm and monitor her for a further 30 mins. Feeling gradually returned to her hands and it was concluded that the symptoms were the effects of cold. The cuff dump had worked correctly during the second dive.

March 2000 00/078  
A diver was kitting up for a rebreather training course. He was wearing a drysuit, became over heated, and fainted. No subsequent ill effects were reported.

March 2000 00/079  
A trainee diver made a stride entry into the water. She then panicked and fainted. No subsequent ill effects were reported.

March 2000 00/077

A diver experienced 'pins and needles' in his foot after a dive to 7m. 1 hour later the symptoms had gone.

April 2000 00/085

Three divers conducted a dive to 20m. After 20 mins one of the divers realized that he was using more air than normal and signaled that he wanted to ascend. They began their ascent, during which this diver started to feel breathless and began to ascend faster. At the surface he was breathless and distressed. He was recovered from the water and partially collapsed. He was given oxygen and made a fast recovery. He had a residual mild chest pain and was advised to contact his doctor.

April 2000 00/086

A diver sustained a very bad cut to her finger whilst using a diving knife whilst out of the water.

April 2000 00/124

Two divers were conducting a dive to 18m. After 15 mins one of the pair developed a slight cough and was beginning to feel cold. She signaled that she wished to ascend. At 6m she experienced breathing difficulties and believed that she had equipment problems. She removed her regulator and purged it. There was no problem with the equipment and she realized that she had a medical problem. At the surface she had great difficulty breathing and her buddy towed her to the shore. She was given oxygen and taken to hospital. Pneumonia was diagnosed, she was given antibiotics and kept in overnight. The diver had taken Sudafed on the morning of the dive. It was suggested that compression on her lungs and her horizontal position during the dive had caused mucus to push up into her windpipe causing a blockage. The diver subsequently made a full recovery.

April 2000 00/288

A diver made an ascent from 25m but during this ascent he became disoriented and faint. Upon surfacing he complained of stomach pains and 'pins and needles' in his arms. He was taken to hospital. (Coastguard report).

April 2000 00/292

A diver with chest pains was transferred to hospital by ambulance. (Coastguard report).

April 2000 00/126

A trainee diver completed a dive to 7m for 36 mins followed by a dive to 9m for 34 mins. The following day he dived again to 19m for 30 mins. He reported no symptoms. Eight days later this diver met others to undertake a further dive. He complained of 'pins and needles' in his knee. Medical advice was sought and the diver was advised to report to a recompression facility. The diver was given a precautionary recompression treatment, but it was concluded that it was very unlikely that the problem was diving related.

April 2000 00/099

A vehicle and trailer were being used to recover an RHIB from the water after a dive. As the tide was low, the vehicle was driven higher up the slipway to gain traction and a rope was used to connect to the trailer. A man with a rowing dinghy on a trailer asked the vehicle driver to move over so that he could get past; this he did. The dinghy user then tried to pass the RHIB and trailer as it was being recovered. He fell backwards from the slipway and landed on a shingle beach. He struck his head and was knocked unconscious. His dinghy collided with the RHIB trailer, rolled off of its trailer and across the unconscious

man's legs. The casualty was given oxygen and an ambulance called to take him to hospital. He was released after two nights. He suffered shock and bruising and was unable to remember the circumstances of the incident.

April 2000 00/296

A father and son were shore diving when on the ascent; the son got stuck in underwater rocks and became distressed. The father gave assistance, but son soon showed signs of hypothermia. The son was airlifted to hospital. (Coastguard report)

April 2000 00/096

A diver was attempting to remove the safety wire from a boat trailer when the towing vehicle was driven away. The top of his finger was severed. The casualty was given first aid treatment to control the bleeding. The top of his finger was packed in ice and taken with the casualty to hospital. It was not possible to re-attach the severed part. The casualty was discharged that evening.

May 2000 00/104

A diver entered the water from an RHIB to begin a wreck dive. As she entered the water she landed on top of a shot buoy to which were attached two smaller buoys on two pieces of rope. She became entangled in this rope. The rope also fouled one of the propellers of the RHIB. The diver realized that she was being pulled towards the boat. One of the propellers was rotating although it was believed to have been out of gear. She shouted to the cox and the engines were stopped. The propeller struck her leg and she felt water enter her suit. Other divers helped her to free herself from the rope and she was recovered into the boat. Her leg was found to have been badly bruised and there was damage to her drysuit, a torch, and a marker buoy that had been in a leg pocket of the suit.

May 2000 00/310

An accident during a wreck dive resulted in a diver severing part of his finger. He and his finger were transferred to hospital by ambulance. (Coastguard report).

May 2000 00/138

A trainee undertook a dive to 11m during which he was helped to resolve a mask clearing problem. Back at the surface he complained of discharge from his ear, and when he attempted to clear his ears air could be heard coming from the ear. He sought medical advice and a ruptured eardrum was diagnosed.

May 2000 00/436

Lifeboat launched to assist diver with illness. Two persons brought in. (RNLI report)

May 2000 00/235

A trainee diver was conducting an 18m dive in a hired semi-drysuit. She became cold and signaled that she wanted to ascend. She later reported that she had developed a severe headache and felt unable to breathe. A delayed SMB was deployed and a 4 min ascent was made. At the surface this diver was distressed, spat out her regulator and was sick. She was recovered into the boat and taken ashore. Two medically trained personnel examined her and hypothermia was diagnosed. She recovered after a warm shower.

June 2000 00/189

During a descent a diver experienced problems with his ears. At

15m he was unable to descend further and after 20 mins the dive was terminated. At the surface the diver experienced problems keeping buoyant and called for assistance. He was found to be wearing an 11kg weightbelt and the mouthpiece of his alternative air source was not correctly attached.

June 2000 00/152

A diver rolled into the water from his boat but struck his head (possibly on the boat's stabilizer or propeller). The diver was taken to hospital by helicopter and ambulance. (Coastguard report)

June 2000 00/190

A diver was at 17m, 10 mins into the dive, when she was sick. This caused her to panic. Her buddy started to help but their instructor brought her to the surface. The last 3m of the ascent was rapid. At the surface she continued to be sick and there were signs of blood in her vomit. She was taken by ambulance to hospital and retained overnight. It was suggested that fish eaten the night before may have been responsible for the condition.

June 2000 00/441

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

June 2000 00/170

A diver had attended a lecture during which she felt uncomfortable as a result of high air temperature and the brightness of the light from an overhead projector. Later she was carrying diving equipment along the side of a swimming pool when she started to fit. She was given first aid treatment. The fit lasted for 3 mins. The casualty was reported to have suffered fits previously although not an epileptic.

July 2000 00/447

Lifeboat launched to assist diver with illness. Dive boat brought in, in adverse conditions. (RNLI report)

July 2000 00/197

Two divers completed a dive to 36m for a duration of 26 mins. After the dive one of the pair experienced 'pins and needles' in his right wrist, then, 5 mins later, in his right knee and foot. 1 hour later his wrist had recovered but he still had a problem with his knee and foot, and he sought medical advice. He was checked for symptoms of DCI but none were found. The symptoms resolved.

July 2000 00/359

A dive RHIB reported hitting a large wave and a diver/crewmember had fallen and struck the transom causing injury (including some lost teeth). An ambulance met them once alongside and conveyed the casualty to hospital. The speed of the RHIB at the time of the incident is unknown; the wind was force 4. (Coastguard report).

July 2000 00/362

A dive to 31m resulted in a ruptured eardrum and a trip to hospital by ambulance. This diver's profile was believed to be normal. (Coastguard report).

July 2000 00/364

A diver completed a normal 15m dive for 45 mins. On surfacing he complained of chest pain and aching to the top of the arms.

He was airlifted to a hyperbaric unit, but was diagnosed as suffering from a mild heart attack. (Coastguard report)

July 2000 00/201

A diver completed a dive to 10m for 32 mins followed by a dive to 7m for 10 mins. After the second dive he was sick and had no recollection of the dive. There were no other apparent abnormalities. He was advised to contact his doctor.

July 2000 00/177

An instructor completed a training dive to 15m for 34 mins. Afterwards he suffered a headache. After an interval of 3 hours he dived again to 12m for 21 mins, with a 1 min stop at 6m. After the second dive he complained of headache and nausea. He was placed on oxygen, given fluids, and medical advice was sought. He was taken to a recompression facility where he was examined. It was concluded that he was not suffering from DCI. His condition slowly improved and he planned to return for a final check up the following day.

July 2000 00/176

A trainee complained of a painful left ear following a sheltered water lesson to practice assisted ascent and controlled buoyant lift techniques. She was examined by a doctor who referred her to an ENT specialist. The final diagnosis by the specialist was a ruptured eardrum.

July 2000 00/204

20 mins into a dive to 21m a diver felt sick and aborted the dive. 15 mins later, having left the water, he was sick. He had completed three dives to 6m the day before. He was given oxygen. The problem was not believed to be diving related.

July 2000 00/376

As 2 divers entered the water backwards off an RHIB they clashed heads. One diver was later taken to hospital suffering from suspected concussion. (Coastguard report).

August 2000 00/381

A diver surfaced from a 30m dive with a nosebleed and generally feeling unwell. Coastguard obtained medical advice. No evacuation was necessary but the casualty was closely monitored. (Coastguard report).

August 2000 00/386

A dive to 22m for 30 mins led to a severe headache. Coastguard obtained medical advice. Oxygen was administered but evacuation to a hyperbaric unit was not considered necessary. (Coastguard report).

August 2000 00/229

A diver dived to 6m where he experienced vertigo and aborted the dive. After the dive he was sick and felt unwell. He felt dizzy and had some pain in his ear. He was advised to seek medical opinion.

August 2000 00/398

Divers had been practicing rescue drills and had a 'yo-yo' dive profile. One surfaced with a severe headache and vomiting. He was taken to hospital by ambulance. (Coastguard report).

September 2000 00/408

A call to assist one diver in pain with breathing difficulties turned into a group of 4. They were all taken to hospital, but none



needed hyperbaric treatment. (Coastguard report).

symptoms.

September 2000

00/248

A diver completed a number of dives, the last of which was to 32m for 56 mins with 8 mins of decompression stops. Later that evening he had a tight feeling in his stomach and was sick. The following morning he felt no better and sought medical advice. Food poisoning was suspected but the casualty was given a precautionary recompression treatment. This did not resolve his

September 2000

00/416

A 148m wreck dive resulted in this diver being taken to hospital suffering from reported symptoms of near drowning. (Coastguard report).

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## Boating & Surface Incidents

October 1999 00/255  
 A dive RHIB with 4 POB broke down 12 miles south of Stornoway. It was located and towed to Stornoway by the RNLI lifeboat. (Coastguard report).

October 1999 00/257  
 A dive boat became swamped, due to overloading, and a red flare was fired. 2 divers were sub-surface at the time. A local vessel recovered the dive boat and 5 occupants, whilst the 2 sub surface divers were recovered by another diving boat. I have recorded an overloaded dive boat as dangerous practice. (Coastguard & RNLI report)

October 1999 00/420  
 Lifeboat assisted in the search for missing diver(s). (RNLI report)

October 1999 00/421  
 Lifeboat launched to assist dive boat with steering problems. Craft towed in. (RNLI report)

October 1999 00/452  
 Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report)

October 1999 00/261  
 A mobile phone call to Coastguard reported 3 divers some 1.25 hours overdue from a dive. They were found 2 miles from the dive site by searching boats and a RNLI lifeboat. These divers were reported FAR TOO LATE. (Coastguard & RNLI report)

October 1999 00/422  
 Two lifeboats launched to assist dive boat with engine problems and missing diver(s). Three people landed and craft escorted in. (RNLI report)

October 1999 00/263  
 A dive vessel suffered transmission failure with 5 divers down. All divers were recovered by lifeboat which then towed the dive vessel into port. (Coastguard & RNLI report)

October 1999 00/264  
 A dive RHIB with 4 POB, hit an underwater object and ripped the bow section off. A Mayday was broadcast and the vessel was recovered by a lifeboat. Classed as 'other'. (Coastguard report).

November 1999 00/024  
 Three divers completed a dive to 36m for 33 mins. They launched a delayed SMB and made their ascent. The cox in their cover boat was unable to start the engine, and the boat was carried away from the divers. The divers surfaced, swam to a navigational buoy and hung onto it. The cox alerted the Coastguard. A lifeboat and a military police boat came to their assistance. The divers were recovered into their boat and one of these divers managed to restart the engine. They were escorted back to shore by the lifeboat.

November 1999 00/040

Six divers in a RHIB were returning from a dive when the boat was swamped by a wave. The boat was bailed out and the engine restarted. After a few minutes the engine stopped running and could not be restarted. They alerted the Coastguard and a lifeboat was launched to assist them. The boat was towed ashore. It was subsequently found that water had entered the fuel tanks.

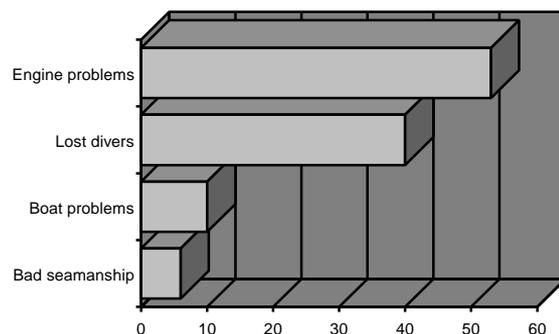
November 1999 00/036  
 With three divers in the water the throttle of an RHIB became jammed and the cox was thrown into the water. He fired a flare which was seen by two fishing boats. One of the fishing boats recovered the cox. The Coastguard was alerted and the cox was airlifted to hospital suffering from hypothermia. The three divers were recovered by another fishing boat and returned to their RHIB. The divers were escorted back to the shore by a lifeboat. (Coastguard & RNLI report)

November 1999 00/266  
 A dive boat with 6 POB reported engine failure. It was towed in by a RNLI Lifeboat. (Coastguard report).

November 1999 00/423  
 Lifeboat assisted in the search for missing diver(s), others coped. (RNLI report)

November 1999 00/039  
 A trainee was practicing picking up a buoy at slow speed when the RHIB's propeller struck a sand bar. This resulted in damage to the propeller.

### Analysis of boating & surface incidents



December 1999 00/268  
 The public reported a dive vessel as sinking in adverse weather conditions. It transpired that this RHIB, plus 2 others, were carrying out diving 'frolics' and were in no danger. (Coastguard & RNLI report)

January 2000 00/270  
 A diver, with no surface detection aids, lost contact with his boat

and drifted on the surface for 12 miles before being found by a RNLI Lifeboat. (Coastguard report).

January 2000

00/271

A dive RHIB, with 2 POB, suffered engine failure and was towed into port by another local boat. (Coastguard report).

January 2000

00/069

Two divers planned a dive to 40m. They planned to launch a delayed SMB once they reached the seabed and instructed the boat skipper to follow it. They stated that they would have a maximum dive time of 1 hour, and that they would drift to the south. At the end of their dive they completed 20 mins decompression. On surfacing they could see the boat in the distance but could not attract its attention. They were carried out of sight around a headland. They activated an EPIRB and inflated three other delayed SMBs that they were carrying. After a wait of 3 hours 45 mins they were spotted by a searching aircraft and picked up by a lifeboat. Their boat's skipper had waited 3 hours before raising the alarm. Their SMB had not remained at the surface and the skipper had lost sight of them. The EPIRB did not

February 2000

00/424

Two lifeboats launched to assist dive boat with engine problems and missing diver(s). Three people landed and craft escorted in. (RNLI report)

February 2000

00/067

On their way to a dive site, divers noticed another RHIB in difficulties. They went to their assistance and found that their engine had failed. They had an auxiliary engine but this would not work either. They took the boat in tow to bring them back to shore. On the way an RNLI boat came alongside for a while. Once ashore they were met by the Coastguard.

March 2000

00/275

A dive boat with 4 POB suffered engine failure and was towed into port by another local dive boat. (Coastguard report)

March 2000

00/072

Two divers entered the water for a dive to 14m. The dive boat lost contact with the divers' bubbles and the Coastguard was alerted. Two helicopters, two lifeboats and two other vessels joined the search. The divers were found at the surface 2 hours later. No subsequent ill effects were reported. (Coastguard & RNLI report)

March 2000

00/280

Two divers drifted on the surface for a mile after their surface marker buoy failed and their dive support boat lost sight of them. They were rescued by RAF helicopter and transferred to hospital suffering from hypothermia. (Coastguard report)

April 2000

00/286

A dive boat broke down with one diver in the water. A local fishing vessel recovered the diver and towed the dive boat to port. (Coastguard & RNLI report)

April 2000

00/097

The engine of an RHIB failed whilst the passengers were searching for a dive site. The Coastguard was alerted and the

boat was anchored. A lifeboat towed the craft back to the shore.

April 2000

00/294

A 999 call from a member of the public reporting divers in distress. They had become separated from their dive boat, which eventually picked them up. (Coastguard report).

April 2000

00/299

A dive boat with 6 persons on board broke down and was towed in by a RNLI lifeboat. (Coastguard report).

April 2000

00/300

A member of the public rang 999 to report 2 divers in difficulties. Both were recovered by the inshore lifeboat. The shore divers had been swept out to sea by the strong tide. (Coastguard & RNLI report)

April 2000

00/301

A tender to a dive vessel with 3 divers onboard capsized in a heavy swell. All persons were picked up from the water by another vessel. (Coastguard report).

April 2000

00/425

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

April 2000

00/426

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

April 2000

00/305

A RHIB reported 2 divers lost, and boat was unsure of its position. Divers were eventually found once position was established. (Coastguard report).

April 2000

00/304

Two shore divers got into difficulty after being swept out to sea in a strong tide. Both were recovered by a passing local vessel. (Coastguard & RNLI report)

April 2000

00/427

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

May 2000

00/309

A dive boat, with no communication equipment, raised the alarm via a passing boat that they had lost two divers following a drift dive. Following a surface search, the divers were located by their own RHIB. (Coastguard & RNLI report)

May 2000

00/429

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

May 2000

00/430

Two lifeboats assisted in the search for missing diver(s), others coped. (RNLI report)

May 2000

00/431

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

May 2000 00/433  
 Lifeboat launched to assist dive boat that was out of fuel. Craft and 5 crew brought in. (RNLI report)

May 2000 00/432  
 Lifeboat launched to assist swamped dive boat. Craft and 6 crew brought in. (RNLI report)

May 2000 00/144  
 Two divers had completed a 25 min dive to 15m and were conducting a 1 min stop at 6m under a delayed SMB. An RHIB passed over the SMB and the line was caught in its propeller. The diver was dragged upwards for 2m before he released the reel. The SMB was recovered but the reel was lost. The diver suffered no subsequent ill effects.

May 2000 00/434  
 Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report)

May 2000 00/437  
 Lifeboat launched to assist dive boat with engine problems. Craft escorted in. (RNLI report)

May 2000 00/438  
 Two lifeboats launched to assist dive boat with engine problems and missing diver(s). Three people landed and craft escorted in. (RNLI report)

lifeboat suffering from the effects of cold. (Coastguard & RNLI report)

May 2000 00/156  
 An RHIB was being used on its third dive trip of the day, having been laid up for the winter. Three pairs of divers entered the water and the cox anchored the boat. Each pair carried an SMB. One diver from the first pair had a drysuit problem and the dive was aborted. The cox buoyed the anchor to go to recover them. 15 mins into their dive, one of the second pair experienced problems with a stuck open drysuit inflation valve, and the dive was aborted. These divers were also recovered into the boat. The third pair completed their dive and surfaced 200m from the boat. The boat engine then stopped and could not be restarted. The third pair swam to the boat. The boat was now drifting, without an anchor. The divers were unable to attract the attention of passing boats and contacted the Coastguard by radio. They had to use a hand held radio as the radio on the boat had a seized volume control and would only operate on channel 16. A nearby yacht came to their assistance and towed them into harbour.

June 2000 00/147  
 A pair of divers were missing after a dive. The Coastguard was alerted and a helicopter and lifeboat were launched. The divers were located and recovered. It was then discovered that a second pair were also missing, the search was resumed, and the second pair were safely recovered. (Newspaper report only)

June 2000 00/440  
 Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report)

June 2000 00/326  
 A dive charter boat struck an underwater object and damaged the propeller. The 8 divers aboard were transferred to another vessel, whilst the dive boat was towed in by a lifeboat. (Coastguard & RNLI report)

June 2000 00/329  
 A dive boat flooded its engine whilst changing fuel tanks. Whilst temporarily out of action, the crew realized that 2 divers had drifted away. The divers were later picked up by a yacht. (Coastguard & RNLI report)

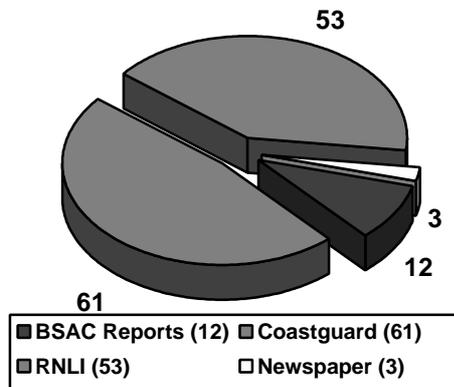
June 2000 00/327  
 A dive boat reported one diver 10 mins overdue, but recovered the diver just as the helicopter arrived. (Coastguard report).

June 2000 00/328  
 Following on from the above (00/327), and shortly afterwards, this hapless party suffered engine failure in both engines and the boat was swamped. 7 persons were rescued by Coastguard helicopter whilst one remained on board and was escorted into Portland harbour. (Coastguard report).

June 2000 00/330  
 A dive boat with 4 POB suffered engine failure and was towed into port by lifeboat. (Coastguard report).

June 2000 00/333  
 A RHIB with 8 POB suffered engine failure. It was towed in by lifeboat. (Coastguard & RNLI report)

**Boating & surface incident report source analysis**



May 2000 00/439  
 Lifeboat assisted in the search for and recovered two missing divers. (RNLI report)

May 2000 00/322  
 MRSC Brixham was alerted to a dive boat that had broken down. The boat was successfully re-started prior to rescue units arriving. (Coastguard report).

May 2000 00/321  
 A search for a missing diver ended when he was recovered by another searching dive vessel. The diver was taken ashore by

- June 2000 00/455  
A hard dive boat was reported to have been driven dangerously close to other boats and divers in the water.
- June 2000 00/334  
Three pairs of divers were on a drift dive. Whilst recovering two pairs the boat lost sight of the third who drifted off. Following a search the two divers were found safe and well. (Coastguard & RNLI report)
- June 2000 00/337  
An element of confusion reigned when a dive boat reported 2 divers missing. Coastguard units were dispatched to search. The lost divers were picked up by another dive boat. Shortly afterwards, this hapless bunch reported losing 2 more divers. A rescue helicopter was tasked to search this time. Fortunately, the same dive boat rescued them again. The tide was reported to have been setting at a rate of 2 knots. This lot found out the hard way. It's easier to check the tide tables beforehand. (Coastguard & RNLI report)
- June 2000 00/338  
Following on from the above (00/337), another pair of divers (from the safe group) were reported lost shortly afterwards. A search involving a helicopter, lifeboat and Coastguard teams was launched. Both divers were later found safe and well sitting on some rocks. Who planned this fiasco? (Coastguard report).
- June 2000 00/137  
Two divers completed a wreck dive in a depth of 31m. In an increasing current they deployed a delayed SMB to make their ascent. The SMB line became slack, the buoy was not held vertically at the surface, and was not seen by the dive boat. On surfacing the divers could not see their boat. They inflated a second delayed SMB and waved a yellow flag. The boat party realized that the divers were missing and this boat and two others began a search. The divers were found after 45 mins at the surface and safely recovered.
- June 2000 00/339  
A dive boat with 4 POB suffered engine failure. They were towed 11 miles into port by a lifeboat. (Coastguard report).
- June 2000 00/341  
Two divers were reported as being missing. After a search involving a RNLI inshore lifeboat, Coastguards and other vessels, the divers were found safe and well by their dive boat. (Coastguard & RNLI report)
- June 2000 00/442  
Lifeboat launched to assist dive boat with engine problems. (RNLI report)
- June 2000 00/342  
A search was initiated for an overdue shore diver. He was located safe ashore but required medical treatment by air ambulance staff for abdominal cramps. (Coastguard report).
- June 2000 00/444  
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report)
- June 2000 00/344  
A diver surfaced about 0.75 mile from his dive boat. He was found safe and well after a short search. (Coastguard & RNLI report)
- June 2000 00/345  
A dive RHIB with 8 POB capsized at the entrance to a harbour. 7 persons made the shore unaided whilst a RNLI lifeboat rescued the remaining person and gave medical assistance. (Coastguard report).
- June 2000 00/346  
A dive boat ran out of fuel and was towed into port by an inshore lifeboat. There were 9 POB. (Coastguard report).
- June 2000 00/348  
A dive boat with 9 POB suffered total engine failure. It was towed in by an RNLI lifeboat. (Coastguard & RNLI report)
- July 2000 00/350  
Coastguard began searching for a dive boat reported overdue. It transpired that the dive boat had returned safely, but the divers had forgotten to inform their shore contact, which quite rightly, reported them missing. (Coastguard report).
- July 2000 00/351  
A dive RHIB with 7 POB suffered engine failure and was towed into port. (Coastguard & RNLI report)
- July 2000 00/160  
Two pairs of divers entered the water from an RHIB to conduct a drift dive in a depth of 25m. The plan was that they would each launch a delayed SMB 5 mins into the dive. Unknown to the boat cover one pair were dropped in a 1 to 2 knot current as anticipated, but the other pair found themselves in still water. The boat followed the moving buoy. The pair in still water made their way towards the shore but the boat party did not spot their buoy. The drift divers surfaced and were recovered after a 30 min dive. A search was then made for the missing divers. The Coastguard was alerted and a lifeboat, a helicopter and other local boats conducted a search. The RHIB was low on fuel and before returning to harbour went to the furthest point down current and made a final search along the shore. They found the missing divers, safe and well, on shore, only 150m from their entry point. The search was called off and the divers were checked by the helicopter crew and returned to the harbour.
- July 2000 00/352  
A dive boat with 6 POB reported engine failure. The dive boat was towed into port by an RNLI inshore lifeboat. (Coastguard report).
- July 2000 00/163  
Two pairs of divers entered the water to conduct a dive. One pair were recovered after their dive, but the other pair were not located. The Coastguard was alerted and three lifeboats and a helicopter were launched to search. The divers were found 70 mins after the emergency call by the helicopter and safely returned to shore. The divers had surfaced 100m from their boat but were not seen. They were finally recovered two and a half miles from their entry point.
- July 2000 00/446  
Lifeboat launched to assist dive boat that was out of fuel. Craft towed in. (RNLI report)



- July 2000 00/358  
Coastguard began to search for an overdue dive vessel; after a short while it became clear that the divers had returned safely, but had forgotten to make a scheduled call on their return. (Coastguard report).
- July 2000 00/448  
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report)
- July 2000 00/449  
Two lifeboats assisted in the search for missing diver(s). Others coped. (RNLI report)
- July 2000 00/450  
Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report)
- July 2000 00/366  
A diver surfaced away from his dive vessel and drifted for 55 mins before being located by a searching fishing vessel, approx 1 mile from the dive site. (Coastguard report).
- July 2000 00/372  
A dive boat with 7 POB suffered engine failure and was towed into port by another dive vessel. A lifeboat also attended. (Coastguard report).
- July 2000 00/374  
An RHIB reported engine failure and was unable to recover 2 divers. Both divers and RHIB recovered by inshore lifeboat. (Coastguard & RNLI report)
- July 2000 00/451  
Lifeboat launched to assist dive boat with engine problems. Others coped. (RNLI report)
- July 2000 00/377  
A RHIB called for assistance to locate 3 missing divers on a drift dive. They were located and rescued by an inshore lifeboat. (Coastguard & RNLI report)
- August 2000 00/382  
A hazardous incident report was generated after a dive charter boat, after hurling abuse and profanities, proceeded to run over a tender being towed astern of a private yacht, who accidentally got too close to a SMB. No 'A' flag was reported as being seen. Clearly an ambassador for the sport of diving! A deliberate close quarters situation must be classed as dangerous practice. (Coastguard report).
- August 2000 00/383  
A dive charter vessel with 15 POB reported she was aground and taking water. The divers were taken off by lifeboat, and the stricken vessel was pumped out and later re-floated. Classed as 'other'. (Coastguard report).
- August 2000 00/385  
A dive boat with 4 POB reported engine failure. It was towed into port by a passing yacht. (Coastguard report).
- August 2000 00/389  
A dive RHIB suffered engine failure with 2 divers down. Both divers were recovered by lifeboat and the RHIB towed to port. (Coastguard report).
- August 2000 00/396  
A dive RHIB with gearbox failure was towed into port by a local vessel. (Coastguard report).
- August 2000 00/404  
A pair of divers drifted away from their support vessel. They were located by another vessel in the area. (Coastguard report).
- August 2000 00/403  
A dive vessel with 5 POB reported engine failure. A local angling boat towed it in. (Coastguard report).
- September 2000 00/240  
Two divers were reported missing and a search was initiated including a helicopter. They were later found by their boat and safely recovered. (Newspaper report only).
- September 2000 00/412  
A diver was reported missing, but was later found safe and well on the opposite side of the Loch. (Coastguard report).
- September 2000 00/413  
A dive vessel broke down with 3 divers sub-surface on a shotline. A lifeboat recovered the 3 divers and towed the dive vessel into harbour. (Coastguard report).
- September 2000 00/415  
A shore diver was swept away by a strong tide. He was spotted by a passing boat and landed safely ashore. (Coastguard report).
- September 2000 00/244  
An RHIB with four divers and a cox onboard suffered an engine failure and anchored just off a lee shore. At one point they had to use the boat's paddles to relay the anchor which was dragging. The Coastguard issued a 'Pan Pan' call. A passing pleasure boat towed them safely to harbour.
- September 2000 00/247  
A group of divers set off to dive in two inflatable boats. At the dive site four divers entered the water. The engine of one of the boats then failed. The cox indicated that the other boat should cover the divers and he then anchored the boat. The engine of the second boat then failed. The Coastguard was alerted and a lifeboat and other craft were tasked to assist. The engine of the second boat was then restarted and two of the divers were recovered. The other two were picked up by a fishing boat and were believed, for a while, to be missing. The boat with the failed engine was towed back into harbour and all divers were safely recovered.

## Ascents

October 1999 00/254

Two divers presented themselves at a doctor's surgery reporting missing stops. No symptoms were apparent at the time. Both were assessed by the doctor. This incident is not related to the previous one (00/253). (Coastguard report).

October 1999 00/253

A diver surfaced and reported missing 14 mins of stops. He was taken to hospital by ambulance for observation. (Coastguard report).

October 1999 00/048

Two divers completed a dive to 35m for 34 mins. During their ascent they slowed down at 12m in preparation for a decompression stop. At this point one of the pair lost control of his buoyancy and started to ascend. His buddy attempted to slow the ascent but was unsuccessful. At 4m the buddy stopped his attempts and re-descended to complete his stops. The buoyant diver rose to the surface and gave the emergency signal. He was recovered into the boat. His computer showed 13 mins missed decompression. He showed no signs of DCI but refrained from further diving. At the end of the following day he developed a back ache. He sought medical advice and received decompression treatment, there was no change to the back ache and it was concluded that no DCI had occurred.

October 1999 00/020

Three divers completed a dive to 34m for 46 mins. One of the divers was under weighted and made a slightly fast ascent. His computer registered an ascent warning. 2 hours 9 mins later they dived again, this time to 24m. During their ascent one of the three became tangled in fishing line and they descended to 27m whilst this problem was resolved. They re-ascended and, at 10m, the diver who had made the earlier fast ascent felt air in the legs of his drysuit. He attempted to clear this air by turning a somersault but again found that he was under weighted and made a second fast ascent to the surface. His total dive time on this second dive had been 31 mins. On reaching the surface he stopped to check that he was alright and then swam ashore. His two buddies made a normal ascent. Once ashore he noticed that part of his left hand was numb. He felt that this could have been due to a tight wrist seal. He removed his drysuit and placed himself on oxygen. The numbness resolved after a few minutes. No subsequent ill effects were experienced.

October 1999 00/026

Two divers completed a 18 mins dive to a maximum of 32m. They started their ascent when both computers were showing 1 min of no-stop time remaining. During the ascent one of the pair was unable to dump air from the wrist dump of his drysuit and, despite his buddy trying to slow the ascent, they made a rapid ascent to the surface. At the surface both computers showed missed stops. The divers were recovered into their boat. One reported an ache in his knee and the other tingling fingers of one hand. They were placed on oxygen. The Coastguard was alerted and a lifeboat that was nearby on exercise came to assist.

The divers were taken ashore by lifeboat and then flown by helicopter to a recompression facility where they received

treatment. It was concluded that neither diver had suffered from DCI, and that their symptoms were from other factors. It was subsequently determined that the diver's undersuit, which had a smooth surface, had sealed the wrist dump valve from the inside, and that a mesh section, that had been fitted to the undersuit to allow air to escape, did not align with the valve.

November 1999 00/044

A diver completed a dive to 35m. During the ascent he lost buoyancy control at 6m and came to the surface missing planned stops. His total dive time was 21 mins. No subsequent ill effects were experienced.

November 1999 00/265

A backside first, rapid ascent, led to a diver surfacing with lacerated hands, nausea and later, shock. He was transferred to a hyperbaric unit for treatment. (Coastguard report).

November 1999 00/062

After a 25 min dive to a maximum depth of 23m a diver lost control of his buoyancy and made a rapid ascent to the surface. No subsequent ill effects were experienced.

December 1999 00/267

A dive to 29m for 9 minutes and a fast ascent from 15m led to a diver being brought ashore and taken by ambulance to a hyperbaric unit for checks. He was pronounced fit and well. (Coastguard report).

January 2000 00/052

Two divers conducted a dive to 32m. One of the divers lost his weightbelt and they made a faster than normal ascent to the surface. The total dive time was 18 mins and no stops were conducted. No subsequent ill effects were experienced.

January 2000 00/057

After a dive to 18m for 20 mins two divers started their ascent. One of the pair accidentally let air into his BCD, instead of releasing it. As a result he made a fast ascent to the surface. No ill effects were reported.

February 2000 00/060

A diver was making her first dive in a drysuit. 12 mins into the dive, at a depth of 21m, she experienced problems controlling the dump valve and made a fast buoyant ascent to the surface. No subsequent ill effects were experienced.

February 2000 00/073

A trainee and an instructor were 6 mins into a dive at a depth of 21m. The trainee experienced a problem with his regulator mouthpiece and panicked. He made a fast ascent to the surface. No subsequent ill effects were reported.

February 2000 00/088

A diver under training, in a drysuit, made a dive to 15m. 6 mins into the dive he lost control at a depth of 3m and ascended feet first to the surface. No subsequent ill effects were reported.

February 2000 00/087



A diver conducted a dive to 35m for a duration of 15 mins. He was using a different undersuit and experienced buoyancy problems which resulted in a fast ascent to the surface. No subsequent ill effects were reported.

February 2000 00/075  
9 mins into a dive, at a depth of 24m, one of a pair of divers panicked and made a rapid ascent to the surface. No subsequent ill effects were reported

April 2000 00/181  
A diver commenced her first dive of the year. Once on the seabed, at a depth of 14m, she allowed air into her BCD to adjust her buoyancy. The inflation valve stuck in and the diver made an uncontrolled ascent to the surface. Total dive time was 4 mins. No subsequent ill effects were experienced. The diver made no further dives that day.

April 2000 00/112  
Two divers completed a dive to a maximum depth of 36m for a total duration of 41 mins. At 20m they lost control of their buoyancy and made a rapid ascent to the surface, missing decompression stops. One of the pair pulled himself back down to 6m and conducted 10 mins of decompression stops. No subsequent ill effects were reported.

April 2000 00/133  
A diver completed a wreck dive to a depth of 25m. During the ascent, at a depth of 18m, he lost control of his buoyancy and made a rapid ascent to the surface in less than 1 min. The dive duration was 26 mins. The diver was placed on nitrox 33 for 20 mins. No symptoms were experienced and no subsequent ill effects were reported.

April 2000 00/111  
Three divers dived to 36m for a duration of 21 mins. At 18m they lost control of their buoyancy and all made a rapid ascent to the surface missing a 3 min stop at 6m. No subsequent ill effects were experienced.

April 2000 00/183  
Two divers were ascending from a dive to 20m. At 9m one of the pair lost control of his buoyancy and started to ascend. He took hold of the SMB line and both divers were carried to the surface. The buoyant diver had been trying to ascend in a 'prone' position, as he had mis-understood a conversation on decompression and this resulted in air migrating throughout his suit which he could not dump. Both divers were placed on oxygen and neither experienced

April 2000 00/094  
Two divers completed a dive to a maximum depth of 28m for a total duration of 40 mins. They deployed a delayed SMB prior to surfacing and made a normal ascent to 5m. At this point one of the pair felt herself becoming buoyant and was unable to release air from her drysuit through the dump valve. She was carried to the surface missing an indicated 8 mins stops at 3m. Her buddy became tangled in the SMB line and was also taken to the surface. The divers got back into their boat and were placed on oxygen for a total of 1 hour. They took hot drinks. Neither diver felt any symptoms. 48 hours later they conducted a shallow no stop dive. No subsequent ill effects were reported.

May 2000 00/109

Two divers were ascending from a depth of 35m. Buoyancy control was lost at 21m and they made a rapid ascent to the surface. Total dive duration 9 mins. No subsequent ill effects were reported.

May 2000 00/103  
Two divers made a dive to 15m. At this depth they found very low visibility and decided to abort the dive. They deployed a delayed SMB. One of the pair found himself to be too buoyant and, despite his buddy's assistance, he made a rapid ascent from 10m to the surface. The buddy ascended normally. At the surface the diver who had made the rapid ascent complained of an ear pain. Subsequent medical examination revealed a small perforation of the right eardrum. This diver commented that he had felt dizzy and disorientated during his descent on this dive. A full recovery was reported.

May 2000 00/318  
A diver made a fast ascent from 39m after becoming entangled in a buoy line, missing decompression stops. The diver did not show signs of DCI but was taken to a hyperbaric unit for observations. He was released after a few hours none the worst for his experience. (Coastguard report).

May 2000 00/319  
A diver made a fast ascent from 40m. He was transferred to a hyperbaric unit. (Coastguard & RNLI report)

May 2000 00/324  
Two divers surfaced after missing a 13 minute stop at 6m. On surfacing one suffered a bleeding nose. Both were given oxygen and taken to a hyperbaric unit. (Coastguard report).

June 2000 00/187  
Two divers made a dive down an underwater cliff to a depth of 40m. They had been at this depth for about 5 mins when their computers indicated the need for decompression stops. They began their ascent. At 20m one of the computers indicated the need for 4 mins at 3m. At 15m one of the pair switched to nitrox 30. The other diver was experiencing problems with excessive buoyancy and his buddy took hold of him. Despite the buddy dumping air they were both carried to the surface. At the surface one of the computers was clear and the other indicated 1 min of missed decompression stop. One diver breathed oxygen and the other breathed nitrox 30. After 30 mins both divers reverted to breathing air. No symptoms were experienced. The buoyant diver was using a new drysuit that he had only used three times before.

June 2000 00/188  
A diver was using hired diving equipment. At 20m he got into difficulties with his mask and felt that he couldn't breathe. He made a fast ascent to the surface with his buddy. No subsequent ill effects were experienced.

June 2000 00/169  
Two divers conducted a wreck dive at a maximum depth of 34m. They planned to ascend using a delayed SMB. Their planned dive time was 30 mins with 7 mins of decompression stops. At 28 mins they started their ascent. They spotted what they thought was the shotline and decided to ascend up this line. However this was another length of floating line that stopped at 14m. They deployed their delayed SMB but, in doing so, they sank back down to the wreck. They re-ascended and attempted to make a stop at 9m. After 44 mins they were at 6m and one of the divers was buoyant. They were

unable to maintain depth and arrived at the surface. The SMB line was tangled with the shotline some distance away and they had to abandon the SMB reel and line as the boat approached, to prevent a foul with the boat's propeller. They were recovered into the boat and discovered that they had missed 13 mins of decompression stops. Both divers were placed on oxygen and medical advice was sought by mobile phone. The divers were advised to attend a recompression facility and they both underwent precautionary recompression. Neither diver showed any symptoms.

#### June 2000 00/162

Two divers were conducting a wreck dive at a depth of 18m when the weightbelt of one of the pair worked loose. She removed the belt to readjust it but had difficulty due to thick gloves. The weights slid off the belt. Her buddy was able to prevent an immediate buoyant ascent. The pair attempted to make their way back to the shotline, but the buoyant diver lost control and made a rapid ascent to the surface. She was recovered into the boat and placed on oxygen. No symptoms were experienced and no further action was taken.

#### June 2000 00/191

Two divers had been to 18m and came back up to 6m. At this point, one of the divers panicked, lost control of her buoyancy, and made a rapid ascent to the surface. Dive duration 24 mins. No subsequent ill effects were experienced.

#### June 2000 00/159

Two divers completed a dive to 27m and started their ascent after 29 mins. At 20m one of the pair experienced difficulties dumping air from his cuff dump. The other diver indicated that he should hold the SMB line. The first diver was still too buoyant and the second diver dumped air to slow the ascent. The pair ascended from 17 to 7m in 20 seconds. At this point the buoyant diver let go of the line and rose to the surface. The second diver started to descend, regained control and ascended to 6m where he completed a 2 min stop. Both divers were recovered into the boat and the buoyant diver was placed on oxygen although he was showing no symptoms. The boat returned to shore and the Coastguard was notified. The divers were airlifted to hospital from where they were later released with no ill effects.

#### June 2000 00/340

A safety line snagging at 37m led this diver to have an 'explosive' ascent. He was airlifted to hospital. (Coastguard report).

#### July 2000 00/349

Following an abnormal ascent and missed stops, two divers were given oxygen aboard their boat and airlifted to a hyperbaric unit for precautionary treatment, although none were showing DCI symptoms. Dive was to 43.6m for 18 mins. (Coastguard report).

#### July 2000 00/355

A diver ran out of air and made a rapid ascent from a 22m/31 min dive. On medical advice, the casualty was taken to hospital by ambulance. (Coastguard report).

#### July 2000 00/250

A diver's BCD was burned during the trip to the dive site by a torch which had been left on. This diver borrowed a BCD to conduct his dive. He dived to 34m for 20 mins but became

buoyant during the dive, as he consumed air, and made a rapid ascent to the surface, missing decompression stops. He was placed on oxygen for 20 mins. No ill effects were experienced.

#### July 2000 00/353

A fast ascent from 15m left a diver anxious. He was given oxygen and medical advice was arranged by Coastguard. He was advised not to dive for 24 hours. (Coastguard report).

#### July 2000 00/198

During a dive, at a depth of 29m, a diver panicked. His buddy brought him to the surface. They made a rapid ascent. The total dive time had been 18 mins. At the surface the diver who had panicked coughed up a little blood and had a slight pain in his right elbow. One hour later his symptoms had resolved.

#### July 2000 00/205

Two divers were conducting a wreck dive to a maximum depth of 40m. At 32m one of the pair signaled that he could not locate his contents gauge. The other diver did not understand the signal, believed that there was a problem, and signaled that they should abort the dive and ascend. They started their ascent but the diver with the lost gauge was unable to dump air from his drysuit and made an uncontrolled, rapid ascent, to 6m. Here he managed to regain control and conducted a 1 min stop. The divers were separated and the other diver made a normal ascent. Once back in the boat, the diver who had made the rapid ascent was placed on oxygen. The Coastguard was alerted and medical advice was sought. Continued oxygen administration and hospitalization was recommended. On arrival back on shore the diver and buddy were taken by ambulance to a helicopter and then flown to hospital. The diver remained on oxygen for 4 hours. No symptoms were experienced and the diver was discharged from hospital.

#### July 2000 00/206

A diver was negatively buoyant at 20m and felt 'stuck to the bottom'. Her buddy assisted her to the surface and a rapid ascent occurred. No subsequent ill effects were experienced.

#### July 2000 00/207

Whilst practicing controlled buoyant lifts a diver became too buoyant and made a fast ascent to the surface. She had been unable to vent her drysuit. The diver was shaken up but otherwise unhurt.

#### August 2000 00/219

Two divers had completed a wreck dive to a depth of 30m and were ascending the shotline. At 9m the shotline was released from the wreck and the divers were unable to prevent themselves being carried to the surface. At 9m their computers indicated that no stops were necessary, however, on leaving the water one of the computers indicated that 8 mins at 3m had been missed. The dive time had been 23 mins. No subsequent ill effects were experienced.

#### August 2000 00/227

A pair of divers completed a dive to 37m. They deployed a delayed SMB to make their ascent. During the ascent, at 20m, one of the pair lost control of the buoyancy of her drysuit and rose quickly to the surface. Her buddy made a fast ascent to 9m and then completed a normal ascent. The buoyant diver was recovered into the boat and placed on oxygen. She remained on oxygen for 80 mins and experienced no symptoms. Medical advice was sought by radio. It is believed that a faulty drysuit dump valve was the cause of the incident.



No subsequent ill effects were reported.

August 2000 00/402

A diver surfaced from a 40m dive but missed 6 mins of stops. He then suffered vomiting. He was airlifted to hospital. (Coastguard report).

August 2000 00/234

Three divers conducted a dive to a maximum depth of 36m. One of the group was suffering from seasickness prior to the dive. This diver failed to secure the crotch strap of his BCD. The divers began their ascent, deploying a delayed SMB at 30m. At around 25m the diver with the loose strap inflated his BCD instead of dumping, by mistake. He lost control of his buoyancy and because of the loose strap could not regain control. He was carried to the surface missing decompression stops. The other divers surfaced normally. The buoyant diver was placed on oxygen. He developed no symptoms of DCI but was seasick. The Coastguard was alerted and the diver airlifted to a recompression facility where he received treatment. No subsequent ill effects were reported.

September 2000 00/405

A diver made a rapid ascent from a depth of 20m during a 50m dive. He had suffered an intake of water into his suit. He was close to drowning, but improved after O2 was administered. No symptoms of DCI. (Coastguard report).

September 2000 00/245

Two divers undertook a dive to 25m. At the end of the dive they deployed a delayed SMB, but the octopus regulator that they had used continued to free flow. The diver with the free flowing regulator took his buddy's alternative air source. They started their ascent but, at 10m, they became tangled in the

SMB line. They descended to 17m. One of the pair used his BCD's emergency cylinder to regain buoyancy. Despite dumping air they were then carried quickly to the surface. Their computers did not indicate that stops had been missed. Both divers were placed on oxygen for 20 mins and monitored. No subsequent ill effects were reported.

September 2000 00/249

Two divers conducted a wreck dive to a depth of 28m. They started their ascent after 18 mins. At 23m one of the pair felt that he was ascending too fast. He attempted to dump air from both his BCD and his drysuit and his buddy tried to slow the ascent. The buddy could not retain a hold and the buoyant diver was carried too quickly to the surface. He managed to slow the ascent a little but reached the surface within 1 min. His buddy made a normal ascent and they were recovered into the boat. The buoyant diver had no symptoms but was placed on oxygen. Once ashore he sought medical advice. No symptoms developed and no treatment was given.

September 2000 00/410

An elderly diver, who had missed decompression stops, was conveyed ashore by his dive vessel and taken to a hyperbaric unit by ambulance as a precaution. (Coastguard report).

September 2000 00/419

A 46m dive for 26 mins ended with a fast ascent from 36m. The diver was transferred to a hyperbaric unit. Note, the diver's equipment was washed ashore the following day. (Coastguard report)

## Technique

November 1999

00/041

A group of three divers completed a night dive to 22m for a duration of 24 mins. Towards the end of the dive, one of the group had 50 bar remaining at a depth of 20m. He showed this to the dive leader and signaled that they should ascend. During the ascent this diver became concerned that he would run out of air before reaching the surface. He made a fast ascent to the surface and attracted the attention of other divers who were at the surface. The diver was helped from the water. His buddies made a normal ascent. No ill effects were reported.

November 1999

00/031

Two divers were 10 mins into a wreck dive at a depth of 25m. They encountered a third, unknown, diver who indicated that he had a problem. This diver had been diving with two others but had become separated from them. He was very buoyant and was hanging on to the wreck to prevent himself ascending. This diver had just run into decompression requirements. The first pair tried unsuccessfully to transfer weight to him. They also looked around for some loose piece of wreckage to act as weight, but could not find any. They decided to make themselves as heavy as possible, by dumping air, and to hold on to the third diver to slow his ascent. This they did and were able to make a safe ascent including a 1 min stop at 6m. The buoyant diver reported that he had a new undersuit and had not correctly weighted himself. One of the pair left the water with a headache which was resolved after a few minutes on oxygen. The buoyant diver's buddies returned to the surface soon afterwards. No subsequent ill effects were reported.

January 2000

00/063

Three divers were at a depth of 18m. One was struggling to get his buoyancy correct and then got into difficulties breathing. He was given an alternative air source but he spat this out. He was panicking and was brought to the surface. No subsequent ill effects were experienced.

February 2000

00/061

At a depth of 22m one of a pair of divers lost control of his buoyancy and rose to the surface. He waited for his buddy. After a while he decided to re-descend and met his buddy at 3m. They re-descended to 20m where they realized that they had insufficient air to continue. They surfaced again. After one hour they sought advice. They were advised not to dive again for 24 hours. No subsequent ill effects were reported.

February 2000

00/089

Three divers entered the water intending to conduct some training drills which included compass navigation. They descended to 6m and settled onto the quarry floor. One of the three felt uneasy, but he began his compass exercise and swam out into water that was 20m deep. He felt that his weightbelt was slipping and was not able to adjust his buoyancy. He signaled to the others that he wished to ascend. He then started to descend quickly. One of the other two made an ascent but the other realized that there was a problem and swam down after the descending diver. He caught him at 16m but was unable to put air into the heavy diver's BCD. He used his own suit to make a controlled buoyant lift and brought them both to the surface. No subsequent ill effects were reported. The heavy diver was using borrowed equipment and it is believed that the direct feed hose was not the correct one for the BCD. He was also excessively weighted.

March 2000

00/277

A shore diver lost her buddy and panicked. Both divers assisted ashore by members of the public prior to a lifeboat arriving. (Coastguard report).

April 2000

00/084

Three divers were 15 mins into a dive at a depth of 20m. One of the group developed a problem with his fin strap and signaled that he was going to ascend. The other two decided to follow him to the surface. During the ascent, these two became separated and one of them started to sink back down. His buddy thought that he was still ascending. The sinking diver dropped back to the bottom and landed on top of a diver from another buddy pair. He was panicking and struggling. The other divers calmed the panicking diver and then attempted to lift him to the surface using his drysuit. However, air was found to be leaking from the drysuit feed hose and one of the pair lifted the third diver using his own buoyancy. All were safely recovered from the water. The panicked diver had sustained an injury to his ear, but no other ill effects were experienced.

April 2000

00/113

A diver was conducting a cold water orientation dive. 7 mins into the dive, at a depth of 18m, one of his fins came off and his weightbelt slipped. He panicked and made a rapid ascent to the surface. His buddy went with him. No subsequent ill effects were reported.

May 2000

00/110

An instructor and trainee were diving at a depth of 21m. The trainee gave the out of air signal and the instructor gave her his alternative air source. The trainee panicked and made a fast ascent to the surface from 10m without a regulator. Her cylinder was subsequently found to contain 100 bar. No subsequent ill effects were experienced.

June 2000

00/193

Two divers were descending to a planned depth of 20m. At 12m one of the pair panicked and was brought to the surface by her buddy. They made a slightly faster than normal ascent. No subsequent ill effects were experienced.

July 2000

00/196

Two divers were at a depth of 13m when one of them lost a fin. He panicked and they made a fast ascent to the surface. Their total dive time was 21 mins. No subsequent ill effects were experienced.

July 2000

00/200

Three divers undertook a dive in a depth of 20m. After 10 mins they became separated in low visibility. Two of the divers surfaced but the third did not. A search was being organized when the third diver surfaced safely 11 mins later.

August 2000

00/210

Two divers entered the water to dive on a wreck at a depth of 35m. Underwater they became separated in low visibility. One of the pair completed a normal dive including decompression stops, the other became tangled in some fishing nets that were



laying on the wreck. This diver took some time to free himself and he used all of his air, including that in his pony cylinder, in getting back to the surface. He did not deploy a delayed SMB as he wished to conserve the air supply. His total dive duration was 64 mins. This diver's computer indicated missed decompression stops. He was placed on oxygen and the boat returned to shore. The diver had completed a series of 5 dives to 30 - 40m over the previous 3 days. Medical advice was sought and it was decided that he should receive precautionary recompression treatment. The Coastguard was alerted and the diver was flown by helicopter to a recompression facility where he was recompressed. No symptoms of DCI were present at any time.

August 2000

00/395

Five shore divers were observed waving for help. On arrival of the lifeboat it was discovered that the reason for the distress was a lost weightbelt. Her dive buddy escorted her to the shore while the other three continued their dive. (Coastguard report).

August 2000

00/401

A shore diver had problems with her buoyancy and inhaled water. She was pulled from the water and found not to be breathing. First aid was administered. She was airlifted to Dorchester Hospital where she made a recovery. (Coastguard report).

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## Equipment

- October 1999** 00/006  
Two divers were 17 mins into a dive, at a depth of 36m, when the octopus regulator of one of the two went into free flow. They ascended using the alternative air source of the other diver. No subsequent ill effects were experienced.
- November 1999** 00/033  
Two divers made a descent in a quarry. At a depth of 27m one of the pair indicated a problem with his regulator and switched to his octopus regulator. He still experienced problems and accepted the octopus regulator from the dive leader. They started their ascent and at this point the problem regulator began to free flow. The dive leader switched this cylinder off and then back on again at 16m. The dive leader tested the previously free flowing regulator and found it to be working correctly. The other diver then switched back to his own regulator and they made a safe ascent to the surface. The diver reported that he had felt water in both mouthpieces. Examination revealed a small hole in the octopus regulator mouthpiece. The water temperature was recorded as 6 deg C.
- January 2000** 00/180  
During a dive, at a depth of 12m, a trainee experienced a regulator free flow. The trainee had not been trained how to deal with this and started to ascend rapidly. The instructor took control and, using the instructor's alternative air source, they made a controlled ascent. No subsequent ill effects were experienced.
- January 2000** 00/053  
Two divers were 3 mins into a dive at a depth of 24m when both their regulators began to free flow. They made a faster than normal ascent. No ill effects were reported.
- January 2000** 00/058  
Two divers made a slow descent, down a slope, to a depth of 20m. At this point one of the pair started to take in water and signaled that she wanted to ascend. Her buddy brought her to the surface. The ascent was faster than normal. At the surface the diver was distressed, having difficulty breathing and coughing. She was recovered from the water and placed on oxygen. She was taken to hospital and discharged 3 hours later. Subsequent examination of the regulator uncovered a small hole in the mouthpiece.
- January 2000** 00/055  
An instructor and a trainee were at a depth of 20m. The trainee's regulator began to free flow. The instructor brought the trainee to the surface using his alternative air source. They made a fairly fast ascent. Their total dive time was 10 mins. The water temperature was 4 deg C. No subsequent ill effects were experienced.
- February 2000** 00/059  
Two divers were 15 mins into a dive at a depth of 35m when the regulator of one of the pair began to free flow. They made a faster than normal ascent to the surface. No subsequent ill effects were reported.
- February 2000** 00/056
- 3 mins into a shore dive to a depth of 30m a diver's regulator began to free flow. His buddy tried to stop the free flow but failed. The diver spat out the free flowing regulator. The buddy took hold of the other diver's BCD at which point he started to panic. The buddy offered his own regulator but this was spat out and the troubled diver struggled to get to the surface. The buddy stopped him and offered his alternative air source but it was refused. The pair struggled and fell to the bottom with the buddy on top of the distressed diver. Again the alternative air source was offered but rejected. The buddy then released the other's weightbelt. A diver from another pair in the same group came to their assistance and lifted the distressed diver to the surface. The buddy was joined by the buddy from the second pair and, after a few minutes, they made a normal ascent. At the surface the alarm was raised and the distressed diver, who was now unconscious, was recovered from the water. Oxygen was administered and an ambulance was called. The diver was able to talk by the time he was taken to hospital.
- March 2000** 00/080  
An instructor and three trainees were diving to a depth of 31m. 4 mins into the dive, one of the trainees' regulators began to free flow. This diver swam to the instructor to take his octopus regulator. At this point all of the divers' regulators began to free flow. The divers made a rapid ascent to the surface. No subsequent ill effects were reported.
- March 2000** 00/082  
At the beginning of a dive, at a depth of 36m a diver's regulator went into free flow. The dive was aborted and a fast ascent was made. No subsequent ill effects were experienced.
- March 2000** 00/083  
Two divers made a surface swim for 50m then dived to a depth of 20m. At the bottom, the regulator of one of the divers began to free flow. They made a slightly rapid ascent to the surface. No subsequent ill effects were reported.
- April 2000** 00/098  
Three divers conducted a wreck dive to a depth of 36m. 9 mins into the dive, the regulator of one of the group started to free flow. This diver shared air with one of his buddies. He was not able to stop the free flow and the air supply from this cylinder was rapidly lost. Rather than attempting to find the shotline, the divers deployed a delayed SMB, using the free flowing regulator, and made a normal ascent. They swapped the air sharing donor in order to maintain an even spread of the remaining air supply. Later it was found that the regulator had a small knob on the front of the second stage that was set away from the 'Dive' position. The divers were unclear as to the function or purpose of this knob.
- May 2000** 00/131  
A diver experienced air supply problems whilst underwater and became unconscious. He sank to a depth of 18m from where his buddy was able to bring him back to the surface. He was given expired air resuscitation once back in the boat. He was flown by helicopter to hospital, where he made a recovery. (Newspaper report only)
- May 2000** 00/125



A diver experienced problems with his weightbelt and air supply during a dive. He was unconscious at the surface. The Coastguard was alerted and he was airlifted to hospital. Resuscitation techniques were used in the helicopter. A full recovery was anticipated. (Newspaper report only)

July 2000 00/199

Three divers conducted a dive to 18m using rebreathers. One of the group commenced the dive with a headache and was apprehensive. Several minutes into the dive he decided to abort the dive and signaled to his buddies that he was going to ascend. He made his way back to the shotline and started his ascent. He attempted to change from semi-closed operation to open circuit on the ascent. At the surface this diver swam to the boat and then lost the ability to respond or communicate. People in the boat recovered the semiconscious diver and placed him on oxygen. He quickly recovered. It was subsequently discovered that the CO2 absorbent had been

used previously and was exhausted.

July 2000 00/215

Two divers were conducting a dive on a boulder slope at a depth of 17m. One of the pair was too heavy and the dive leader indicated to him to put air into his BCD. This he did and air was seen coming out of the overpressure valve. The divers were then at 21m and the diver who was heavy lost a fin, he panicked and his mask half flooded. The dive leader took hold of him and tried to lift him with a controlled buoyant lift but there was a problem with the BCD. The dive leader therefore lifted the heavy diver using his own BCD, during the ascent he lost the other fin. At the surface the dive leader towed the troubled diver to the shore. He was shaken but unharmed. His BCD was found to be full of water.

## Miscellaneous

- |  |               |  |               |
|--|---------------|--|---------------|
| <p>March 2000<br/>A known drug addict decided to go shore diving, for the first time ever, alone. A member of the public found him lying on the beach suffering from hypothermia. Diving was attempted due to his drug induced state. He was taken into Police custody. (Coastguard &amp; RNLI report)</p> | <p>00/276</p> | <p>May 2000<br/>Lifeboat launched to assist dive boat. False alarm. (RNLI report)</p>  | <p>00/435</p> |
| <p>April 2000<br/>A dive boat with 4 POB was reported overdue. Enquiries revealed that they were OK but had missed their ferry back. (Coastguard report).</p>  | <p>00/283</p> | <p>June 2000<br/>Two lifeboats launched to assist dive boat. False alarm. (RNLI report)</p>  | <p>00/445</p> |
| <p>April 2000<br/>A major search was initiated following a report of a missing dive boat. It was found safe at harbour. (Coastguard &amp; RNLI report)</p>   | <p>00/293</p> | <p>July 2000<br/>Two pairs of divers were preparing to dive from a floating pontoon. One diver was standing on one leg fitting her fin, supporting her self by holding on to an upright on the pontoon. Another diver entered the water and the motion of the pontoon caused the diver fitting her fin to fall into the water. She hit her arm as she fell and smashed her dive watch.</p> | <p>00/203</p> |
| <p>April 2000<br/>A 999 call was received reporting a dive RHIB overdue. A communications search was started but the RHIB returned safe and well. (Coastguard report).</p>   | <p>00/298</p> | <p>July 2000<br/>Two divers reported banging noises coming from the hull of a wreck. Possible trapped persons were reported. SAR units were dispatched to the scene, but all divers in the charter party were accounted for. A false alarm with good intent, classed as 'other'. (Coastguard &amp; RNLI report)</p>  | <p>00/369</p> |
| <p>April 2000<br/>Lifeboat launched to assist divers, others coped. (RNLI report)</p>  | <p>00/428</p> | <p>August 2000<br/>Coastguards commenced to search for a diving party that had been reported overdue. It later transpired that the divers had forgotten to report back and had gone home. Classed as 'other'. (Coastguard report).</p>   | <p>00/388</p> |
| <p>May 2000<br/>A shore diver, following his compass, became disorientated and surfaced a long way seaward. He shouted and blew his whistle to attract attention. A local vessel brought the casualty ashore. (Coastguard report).</p>   | <p>00/312</p> |  |               |

## Overseas Incidents

### Fatalities

June 2000 00/151  
An instructor was taking two trainees on a 'try dive'. They entered the water from a beach and swam a short distance underwater. One of the trainees was finning a bit too strongly and the instructor held him back. The second trainee had a buoyancy problem and whilst the instructor was resolving this the first trainee swam ahead about 5m. The instructor then noticed the first trainee sitting on the bottom, unconscious, with his regulator out of his mouth. The instructor brought both of the trainees to the surface. He gave the first trainee AV and towed him 3 to 4m to the beach. The casualty was given AV and CPR and two doctors, who had been nearby, came to help. The emergency services were summoned but the casualty failed to recover. It is believed that the casualty suffered a heart attack.

### Decompression

November 1999 00/038  
A diver completed a dive to 20m for 48 mins with the last 14 mins spent at 8m. 2 hours later she dived again to 19m for 40 mins with the last 12 mins spent between 6 and 8m. During these dives she had to swim against a water current. The following day, 18 hours later, she experienced a numbness in her left arm and leg. She sought medical advice, was placed on oxygen and then received a series of hyperbaric treatments. She was advised to delay her return flight home. On her return she required further medical attention.

January 2000 00/065  
Two divers were 7 mins into a dive to a maximum depth of 28m when they resurfaced. One of the pair was in distress, coughing and choking. She had been brought to the surface by her buddy using a controlled buoyant lift. Her buddy and another diver towed her 15m to their boat and she was recovered into the boat. She was placed on oxygen. The casualty was taken ashore and given hot fluids. Still on oxygen she was taken, in the recovery position, to a medical facility. She was cold, clammy and uncommunicative. 90 mins after surfacing the casualty complained of pains in her knees, elbows and shoulders, and a headache. 5 mins later she lost consciousness. After a further 5 mins she regained consciousness and complained of sharp pains in all joints. 3 hours after surfacing the diver was recompressed for 4 hours 45 mins. Concerns with a fin and a mask were implicated in the initial problem.

March 2000 00/093  
A diver conducted a series of four dives over a period of 24 hours, the last of which was a night dive. That night she noticed a pink rash on her stomach and some soreness. She did not sleep well that night and felt tired and sore in the morning. She then conducted three dives. She felt better after the first dive. 1 hour after surfacing from the last dive she felt 'bruised and battered' and noticed that the pink rash had become darker. She started to feel very unwell and was placed

on oxygen. She was taken to a recompression facility and received five recompression treatments. Her symptoms were resolved.

March 2000 00/123  
Two divers were conducting a dive at a depth of 20m. 20 mins into the dive the pair were approached by two large sea lions. The sea lions swam around them for a while, then one of them grabbed the left fin of one of the divers dragging him backwards and upwards. The diver made an uncontrolled, inverted ascent to the surface. At the surface he gave the distress signal and was recovered into the boat. His buddy made a normal ascent. Some time later the diver who had made the uncontrolled ascent experienced a tingling sensation behind his left knee which continued for more than 1 hour. He was kept under medical observation, released the following morning and advised not to dive for at least 4 weeks.

April 2000 00/182  
Two divers completed a 17 hour flight followed by a further 1 hour 30 mins flight in an unpressurized aircraft. 2 hours later they undertook a dive during which one of the pair went to 32m. During the ascent she became too light at 10m and rose to the surface. She obtained extra weight and dived again to complete 5 mins of decompression. She then ran out of air and surfaced. The total dive duration had been 30 mins. On surfacing this diver was extremely breathless, had a cough, a tight chest and was shocked. 3 hours later she had recovered. During the night she experienced severe pain under the finger nails of her right hand. The index finger and the little finger then became blue and cyanotic for about 24 hours.

May 2000 00/095  
Two divers conducted a dive to a maximum depth of 42m for a total duration of 45 mins. At 5m one of their computers indicated a 3 mins stop and the other an 8 mins stop. They conducted a 10 mins stop and then made a normal ascent. Some hours later one of the pair showed signs of DCI and received recompression treatment. The other diver showed no symptoms.

May 2000 00/175  
A diver conducted a shore dive to a maximum depth of 19m. During the ascent 5 mins was spent at 9m. At 6m he began to feel anxious and short of breath. He had to swim hard, against a current, in 3m depth to get back to the shore. Once ashore he was very confused and unstable. His right arm was 'flaccid'. He was given oxygen and taken back to his hotel. His condition improved. The hotel doctor diagnosed a 'transient ischemic attack' due to de-hydration. 6 hours later this diver experienced partial paralysis of his left leg and suffered from urine retention. He was placed on oxygen and taken to a recompression facility for treatment. He received 6 sessions of recompression treatment. He then flew back to the UK and received further recompression treatment. A CT scan revealed small cysts on his lungs that were not visible on a conventional x-ray. A gradual, continuing recovery was reported.

May 2000 00/186  
Two divers completed a dive to a maximum depth of 28m. During the ascent, at 15m, the drysuit dump valve of one of the pair stuck and he made rapid ascent to the surface, missing 2

mins of decompression stops. His buddy made a normal ascent including stops. The diver who had made the rapid ascent had no symptoms but was placed on oxygen. The party returned to shore. Later the diver developed symptoms of DCI and he was given recompression treatment. A full recovery was reported. This diver had been using a new drysuit.

### May 2000 00/143

A diver undertook a dive to 18m for 25 mins, 7 hours 15 mins after an aircraft flight. Later that day he dived again to 16m. Some time after this dive he complained of a pain in his arm, he was recompressed and the pain was eased. The following day the diver reported further pain and was recompressed again. DCI was not confirmed. The diver was reported to have been 'hung over', 'not dive fit' and highly apprehensive prior to the dives.

### July 2000 00/208

On vacation a diver completed a series of 6 dives over a 4 day period. These dives were between 10 and 30m, all were no stop dives and all included a 5 min safety stop. This diver was using a dive computer. He had a one day break and completed two further dives. The next day he dived again to 24m for a total of 46 mins which included a 5 min safety stop. Leaving the water he climbed a ladder back onto the boat and noticed a pain in his left bicep. During the second dive that day the pain reduced, he was concerned that this might be a symptom of DCI and terminated the dive. After the dive the pain did not return. Later that evening the pain returned and moved into his left elbow. The diver sought medical advice and received recompression treatment. During the treatment some pain relief was experienced but it returned when he was brought back to atmospheric pressure. He received four further treatments over the following 3 days. 72 hours after the last treatment he flew home without incident. Some pain remained and he was seeking further medical treatment.

### August 2000 00/224

A diver conducted a dive to 21m for 36 mins including a 3 min stop at 6m. 3 hours 36 mins later she dived again to 20m. During this dive she experienced severe cramp in her right leg and lay on the seabed. Her buddy decided to abort the dive, and, as she was unable to use her leg, used a controlled buoyant lift to get her to the surface. The final 3m was quite fast and their computers registered an ascent rate alarm. Back in the boat the cramp was still present and the diver reported 'pins and needles' in the fingertips of her left hand and a headache. The diver was placed on oxygen and assistance was requested by radio. 'Pins and needles' were also experienced in the right hand. The diver was taken to a recompression facility. 1 hour after surfacing the symptoms were improving and she was not recompressed. A further hour later the symptoms had resolved. She remained in hospital under observation for a day before being released. The buddy showed no symptoms.

## Injury/Illness

### December 1999 00/047

A diver's equipment was being lifted out of the water into a RHIB. The RHIB rolled in a swell causing the crew member who was lifting the equipment to slip. The equipment fell back

into the water, hitting the diver on the head. The diver was recovered into the boat, where she complained of blurred vision and a severe headache. Assistance was summoned by radio and the boat returned to shore. The casualty was airlifted to hospital. She was released the following day having made a full recovery.

### March 2000 00/119

A diver completed a dive to 13m for a duration of 33 mins, including a 2 min stop at 6m. 3 hours 30 mins later he dived again to 13m for 27 mins. At the surface he had to swim 60m to the boat. During this swim the diver developed a severe headache. Once in the boat he was placed on oxygen and the symptoms eased after 5 mins. He was given fluids and taken back to the shore. The diver was given a medical examination. Dehydration was suspected and he was given a painkiller, fluids and further oxygen. The symptoms eased and the casualty was kept under observation for 24 hours. This took place in hot climate conditions.

### April 2000 00/142

After a dive a diver was recovered into an RHIB. She then fell and struck her face on a radio bracket. The radio was not in place as it was being repaired. The diver's face was cut and she was taken ashore in another boat where she received medical treatment.

### April 2000 00/121

A diver was ascending a ladder to the upper deck of a dive boat. Whilst climbing this ladder he struck his head on a wooden sign.

### April 2000 00/122

A diver was ascending a ladder to the upper deck of a dive boat. Whilst climbing this ladder he struck his head on a wooden sign, this caused a cut to his forehead. (Same boat but different individual to 00/121)

### April 2000 00/120

A diver loaded a kit bag, picked it up and began to walk away. After two paces he struck his head on the raised tailgate of a parked vehicle. He sustained a cut above his right eye.

### May 2000 00/106

An instructor and a trainee entered the water from a beach. They dived and moved into deeper water. Both divers had trouble clearing their ears. Visibility was poor and at 8m they encountered a current which was carrying them along the shore. They swam back up the slope into chest deep water. They waded back to their entry point and dived again. Again they had problems with their ears and at 6m the instructor became disorientated and dizzy. They ascended directly to the surface. At the surface the instructor was in distress and the trainee shouted for assistance and started to tow him ashore. Other divers entered the water to assist them ashore. Once ashore the distressed diver was given oxygen and taken to hospital. A medical examination failed to reveal any problems.

### August 2000 00/225

A diver conducted a dive to 32m for 31 mins with a 3 min stop at 6m. 5 hours 47 mins later he dived again to 23m for 34 mins with an 8 mins stop at 6m. The decompression stop for the first dive was completed with the diver hanging on to the boat's anchor line with his left hand. The conditions were rough and the anchor line was jerked up and down. 1 hours 52 mins after the last dive he reported a headache and, 30 mins later, a

tingling in the back of his left hand. He was given oxygen. 20 mins later the symptoms had resolved and oxygen was discontinued. 30 mins later he experienced tingling in the left hand side of his face and oxygen was restarted. 33 mins later the symptoms were improved and oxygen was discontinued. The diver reported a numbness in his lower left arm and an elbow joint ache. This was believed to be a muscular problem. 5 days later the diver was concerned that he had a DCI and detailed medical tests were conducted and inflamed joints were diagnosed. Treatment was prescribed and the diver recovered.

#### August 2000 00/239

A diver descended to a depth of 7m. Her contents gauge was seen to be fluctuating and the dive leader took her to the surface. Whilst ascending she felt pain in her ears 'even after equalizing'. At the surface she still had pain and the dive was aborted. Medical examination revealed bleeding in one ear and a perforation in the other. She was given

### Boating / Surface Incidents

#### June 2000 00/129

The engine compartment of a dive boat became swamped and the engine could not be started. The boat was being blown towards a rocky shore and the anchor was deployed. Assistance was sought by radio. The anchor was dragging and no response was received to the radio call. The radio call was escalated through 'Pan Pan' to 'Mayday'. A local boat picked up the 'Mayday' call and came to assist. The disabled boat was taken in tow and returned to harbour.

### Ascents

#### May 2000 00/174

Three divers were conducting a dive on an underwater rock face at a maximum depth of 33m. They ascended the cliff but at a depth of 15m one of the three was unable to control his buoyancy. He was able to release air from his BCD but was not able to make his drysuit dump valve operate. He was carried to the surface, missing a 1 min stop at 6m. Subsequent examination revealed a design fault that allowed the valve to become jammed shut. No subsequent ill effects were reported

#### August 2000 00/223

A diver was conducting a dive to a maximum depth of 28m. Half way through the dive, at a depth of 15m, she was unable to dump air from her drysuit cuff dump and rose quickly to 10m. She managed to swim back down to 15m and stabilize her buoyancy. Her buddy deployed a delayed SMB. The buoyant diver started to rise again and held onto her buddy's manifold. At 5m she let go of her buddy and rose directly to the surface. Her computer indicated 17 mins of missed decompression stops. Back in the boat she was placed on oxygen. Although she showed no symptoms of DCI she received a 1 hour recompression treatment. It was subsequently discovered that her inner suit had blocked the dump valve.

### Technique

#### October 1999 00/021

Two divers descended to a depth of 40m, they exchanged OK signals during the descent. At 40m one of the pair signaled that she was 'not OK' and that she wanted to ascend. She became agitated and started to panic. She was breathing very hard. Her buddy took hold of her BCD in order to calm her down, but she responded with frantic signals and began to fin towards the surface. Her buddy attempted to control the ascent rate. At the surface the buddy gave the distress signal and they awaited recovery by their boat. The distressed diver lay back in the water and was able to regain control. Total dive duration 6 mins. No subsequent ill effects were experienced.

#### January 2000 00/064

A pair of divers conducted a dive to 15m. After 11 mins they surfaced and gave the distress signal to their boat. They were recovered into the boat and placed on oxygen - 5 mins on and 5 mins off, twice. The divers were taken ashore and were given a medical examination. No symptoms were found and the divers were advised not to dive for five days.

#### April 2000 00/185

An instructor was conducting mask clearing drills with two trainees in a depth of 7m. One of the trainees breathed out too hard and water was forced up her nose. This caused her to panic. The instructor took hold of the trainee who was struggling to surface. The trainee was unable to break free and inflated her BCD. In her struggles she knocked the regulator from the instructor's mouth. The instructor was unable to find his regulator and concentrated on controlling the ascent. Once at the surface he ensured that the distressed trainee was alright and then dived again to bring the second trainee to the surface. No subsequent ill effects were reported.

#### June 2000 00/192

Two divers began a dive. At 7m one of the pair experienced problems with his regulator and returned to the surface to fix it. He dived again and they descended to a maximum depth of 37m. 18 mins into the dive they started their ascent. The contents gauge of one of the pair showed 70 bar. They made a slow ascent, dropping back 4m at one point. At 16m they deployed a delayed SMB which had to be untangled. They stopped at 12m for 1 min and the diver who had had 70 bar at the start of the ascent developed cramp. At 9m he had between 0 and 10 bar remaining in his air cylinder. He took what he thought was his buddy's octopus regulator and started to breathe from this. It was, however, his pony cylinder and it was quickly emptied. He fumbled for the buddy's octopus regulator. He then took the main regulator from his buddy's mouth and the buddy switched to his octopus regulator. They slowly drifted to the surface. The buddy re-descended to finish his decompression stops. The diver at the surface orally inflated his BCD but struggled with cramp and from being tipped forwards onto his face. His buddy finally surfaced and towed him to the boat. Back on the boat he breathed oxygen as a precaution. It was subsequently discovered that the contents gauge of the diver who had run out of air stuck at 70 bar.

### Equipment



October 1999 00/029

3 mins into a dive, at a depth of 12 m, the mouth piece came off of a diver's regulator. She attempted to breath from the regulator without the mouthpiece but was not able to. She grabbed her buddy's octopus regulator and they made a safe ascent to the surface. The fastening tie of the mouthpiece was later found to have been missing.

October 1999 00/030

A group of divers descended to a wreck at 30m. 3 mins into the dive the pillar valve 'O' ring of one of the group blew out. She reached for the octopus regulator of another diver but the mouthpiece became disconnected due to no securing tie being present. This diver then swam to another member of the party and used their octopus regulator. They all made a safe ascent to the surface.

November 1999 00/032

An instructor and two trainees dived to 27m in a quarry. At this point the regulator of one of the trainees began to free flow. The instructor passed the trainee his octopus regulator and they all made a controlled ascent. At 10m the free flowing regulator was turned off and then on again and it ceased to free

flow. They reached the surface safely and no subsequent ill effects were reported. The water temperature was recorded as 6 deg C.

April 2000 00/136

A diver dived to 25m for 49 mins. 3 hours 45 mins later she dived again to 25m for 38 mins. After a further 3 hours 24 mins she began a third dive. A few minutes into this dive, at a depth of 22m, her regulator failed to supply air and she made an ascent to the surface sharing air with her buddy.

May 2000 00/161

Two divers were conducting a dive at a depth of 22m when the regulator of one of the pair became detached from its mouthpiece. The diver attracted his buddy's attention and was given an alternative air source. The buddy reattached the mouthpiece and they continued the dive. The diver was using a borrowed regulator since he had experienced problems with his own just prior to the dive. The tie securing the mouthpiece was missing but it was not certain if this had happened during the dive.

## INCIDENT REPORTS

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

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

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

**All personal details are treated as confidential.**

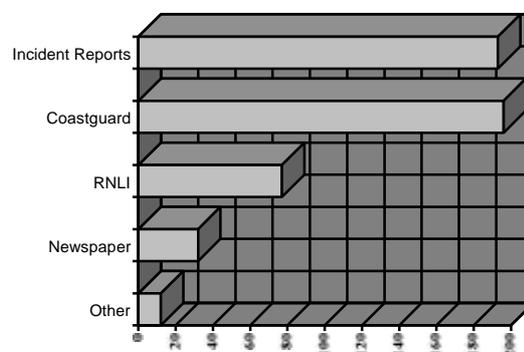
Incident Report Forms can be obtained free of charge by phoning BSAC HQ on **0151 350 6200**  
or from the BSAC Internet website.

## Numerical & Statistical Analyses

### Statistical Summary of Incidents

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Incidents Reported	199	123	263	385	351	315	397	452	397	439
Incidents Analysed	199	123	263	385	351	315	370	431	382	417
UK Incidents	170	98	236	322	318	295	349	404	357	384
Overseas Incidents	24	14	21	9	33	20	21	27	25	33
Unknown Locations	5	11	6	54	0	0	0	0	0	1
BSAC Members	111	110	146	164	157	136	101	135	128	113
Non-BSAC Members	18	13	19	8	20	4	29	52	47	52
Membership Unknown	70	0	98	213	178	175	219	217	182	219

### Incident Report Source Analysis



Total Reports: 510  
Total Incidents: 417

### History of UK Diving Fatalities

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

**LIST OF ABBREVIATIONS USED IN THE INCIDENT REPORT**

AV	Artificial ventilation
BCD	Buoyancy compensation device (e.g. stab jacket)
CAGE	Cerebral arterial gas embolism
CG	Coastguard
CPR	Cardiopulmonary resuscitation
DCI	Decompression illness
DDRC	Diving Diseases Research Centre (Plymouth, UK)
ECG	Electrocardiogram
Helo	Helicopter
ILB	Inshore lifeboat
IV	Intravenous
m	Metre
min(s)	Minute(s)
MRSC	Marine Rescue Sub Centre
PFO	Patent foramen ovale
POB	Persons on board
RAF	Royal Air Force
RHIB	Rigid hull inflatable boat
RNLI	Royal National Lifeboat Institution
SAR	Search and rescue
SMB	Surface marker buoy
999	UK Emergency phone number