BSAC
Dive with us

Annual Diving Incident Report 2024

Introduction

The incident report for recreational diving occurring in the UK and Overseas, for the calendar year 2024.

The majority of information contained within this report is also shown in graphical form. Please note that all data 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 eight incident categories, plus some historical analyses. Within each category, the incidents are listed in the order of occurrence, not necessarily that of Incident Reference.

They are laid out in the following form:

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

Diving incidents often involve multiple contributing factors or outcomes. In such cases, each incident has been categorised according to the most significant cause or effect. For example, if a rapid ascent leads to decompression illness, it will be listed under 'Decompression Incidents'.

We encourage you to read through the details in this report and reflect on the synopses provided. The individuals who shared their experiences have done so with courage and generosity, allowing others to learn from their situations and helping to prevent similar occurrences in the future.

If you ever experience an incident yourself, please consider contributing to the world's most comprehensive recreational diving incident reporting system by submitting a report via the BSAC website or directly through BSAC HQ. Your anonymity is fully protected, and all personal information recorded in the BSAC Incident Report database is handled with the utmost confidentiality.

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BSAC Data Analyst

October 2025

Acknowledgements

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

- Maritime & Coastguard Agency
- MOD Superintendent of Defence Diving
- PADI Europe, Middle East and Africa
- Royal National Lifeboat Institute
- Scottish Sub-Aqua Club
- Sub-Aqua Association
- CFT – Coomhairle Fo-Thuinn – Irish Underwater Council
- RAID – Rebreather Association of International Divers
- Alison Dando for proofreading this report
- 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

Cover photograph by Simon Rogerson

Table of Contents

Introduction	3
Table of Contents	4
BSAC Incident Report 2024 – Analysis	5
Synopses	19
Fatalities	19
Decompression incidents	23
Boating and surface incidents	30
Ascents	35
Technique-related incidents	40
Equipment-related incidents	43
Illness or injury-related incidents	47
Miscellaneous	58
Overseas Incidents	61
History of Previous UK Diving Fatalities	70
Abbreviations used in this and previous incident reports	71

Analysis of the incident database

Each year, BSAC compiles the incident report as part of its role as the National Governing Body for diving in the UK. This report serves to inform all diving agencies and rescue services, supporting strategic decision-making, and provides valuable insights to divers and instructors on emerging trends and contributing factors in diving incidents.

The data encompasses all recreational diving incidents across the UK and is drawn from a wide range of sources. Contributions come from divers of all affiliations, UK and Irish diving agencies, and the various rescue services involved in diver support. Additional data is supplied through annual reports from organisations including the Maritime & Coastguard Agency, RNLI, MOD Superintendent of Defence Diving, and PADI Europe, Middle East and Africa. BSAC also employs a media monitoring service to collect incident reports from press coverage and online sources. A substantial portion of the data is submitted directly via incident reporting forms available on the BSAC website.

To ensure accuracy and avoid duplication - particularly when incidents are reported by multiple sources - BSAC undertakes a detailed triangulation process. This involves cross-referencing the date, location, and description of each incident. We are in most cases confident that we have removed duplications; however in an increasing number of reports we have insufficient information to be sure that the incidents are duplicates, in which case we record both reports.

The incident report excludes commercial diving activities, such as those involving professional scallop fishing or operational work dives conducted in harbours. These types of incidents fall under the jurisdiction of the Health and Safety Executive (HSE). However, we do include recreational instruction dives - even when led by commercial instructors - as they are directly relevant to the sport. Recording these incidents helps inform future updates to training programmes and enhances the guidance provided to both instructors and divers.

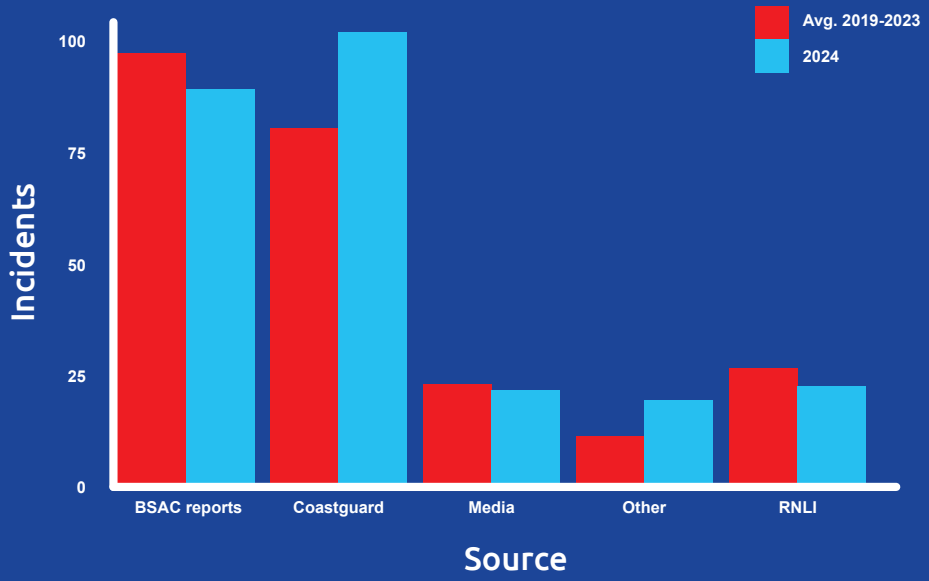


Figure 1
The source of reports contributing to the BSAC Incident analysis

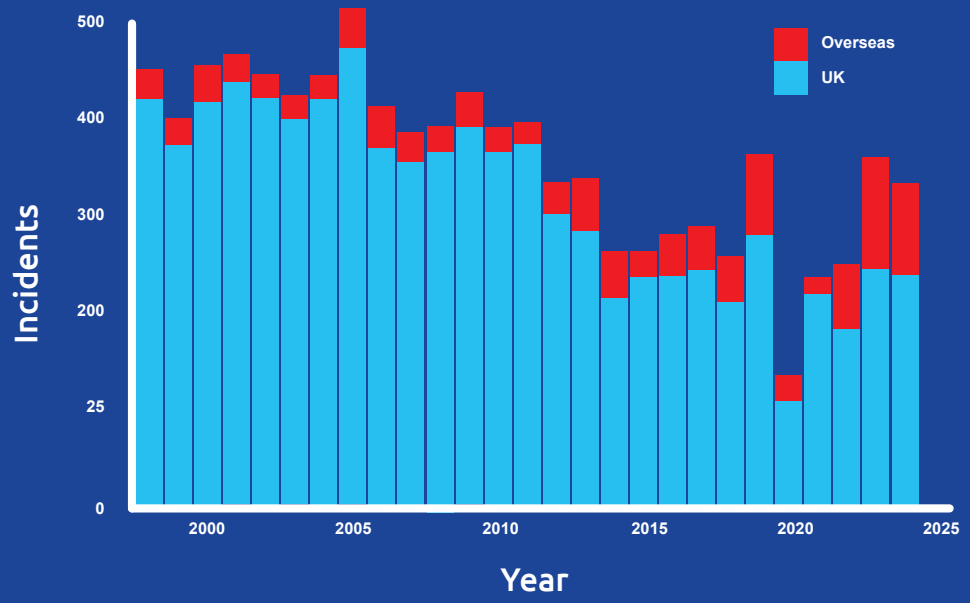


Figure 2
Total number of UK and overseas reported incidents reported each year

Figure 1 illustrates the range of sources from which reports are compiled, representing the total volume of contributions, even when multiple reports pertain to the same event.

During the 2024 calendar year, a total of 331 diving incidents were recorded, of which 92 occurred overseas (see Figure 2). As illustrated in the figure, the number of UK-based incidents has remained largely consistent since 2014, with the exception of the pandemic year, when restrictions on diving activity led to a noticeable decline in reported cases. Continuing the trend observed in 2023, overseas incident reporting has increased - from 66 cases in 2022 to 113 in 2023 and 92 in 2024.

Incidents by Month

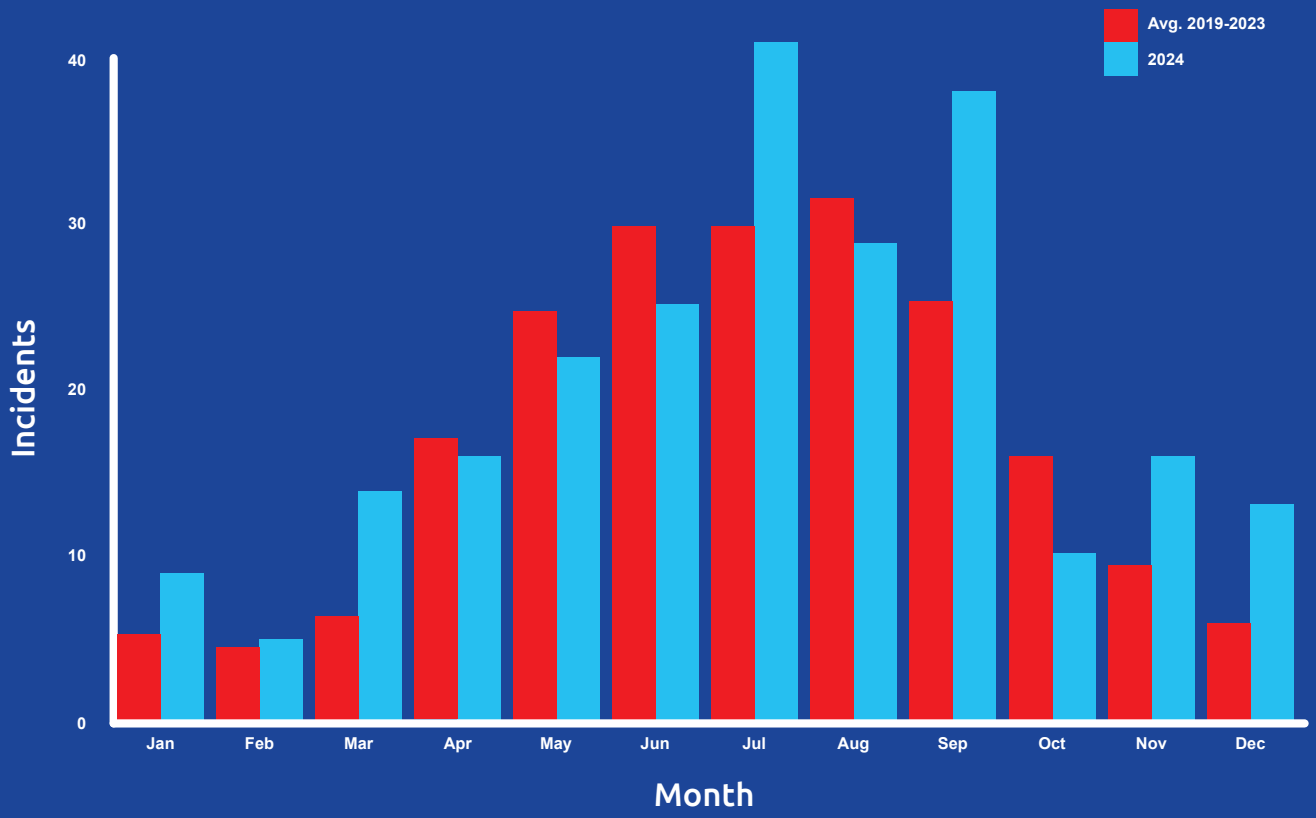


Figure 3
Number of UK incidents occurring in each month of the calendar year

Figure 3 illustrates the number of incidents reported in the UK across each month of the calendar year. As in previous years, the distribution of incidents closely mirrors the periods of peak diving activity - simply put, more diving tends to result in more incidents. Notably, the early-season spike in incidents observed a decade ago has now disappeared; however hidden within these data are incidents occurring in the early season related to buoyancy issues. This is discussed later in the report.

Continuing the trend identified in 2023, September once again saw a higher number of incidents than in any of the previous five years except this year the weather was not as favourable in September as it was in September 2023. We also observed an increase in incident reports during November and December. These incidents are, for the most part, linked to diving at inland sites. We do see some instances of diving occurring throughout the year in weather that is not compatible with safe diving, causing us to call upon the emergency services and the Coastguard to give helpful ‘words of advice’.

Incidents by Category

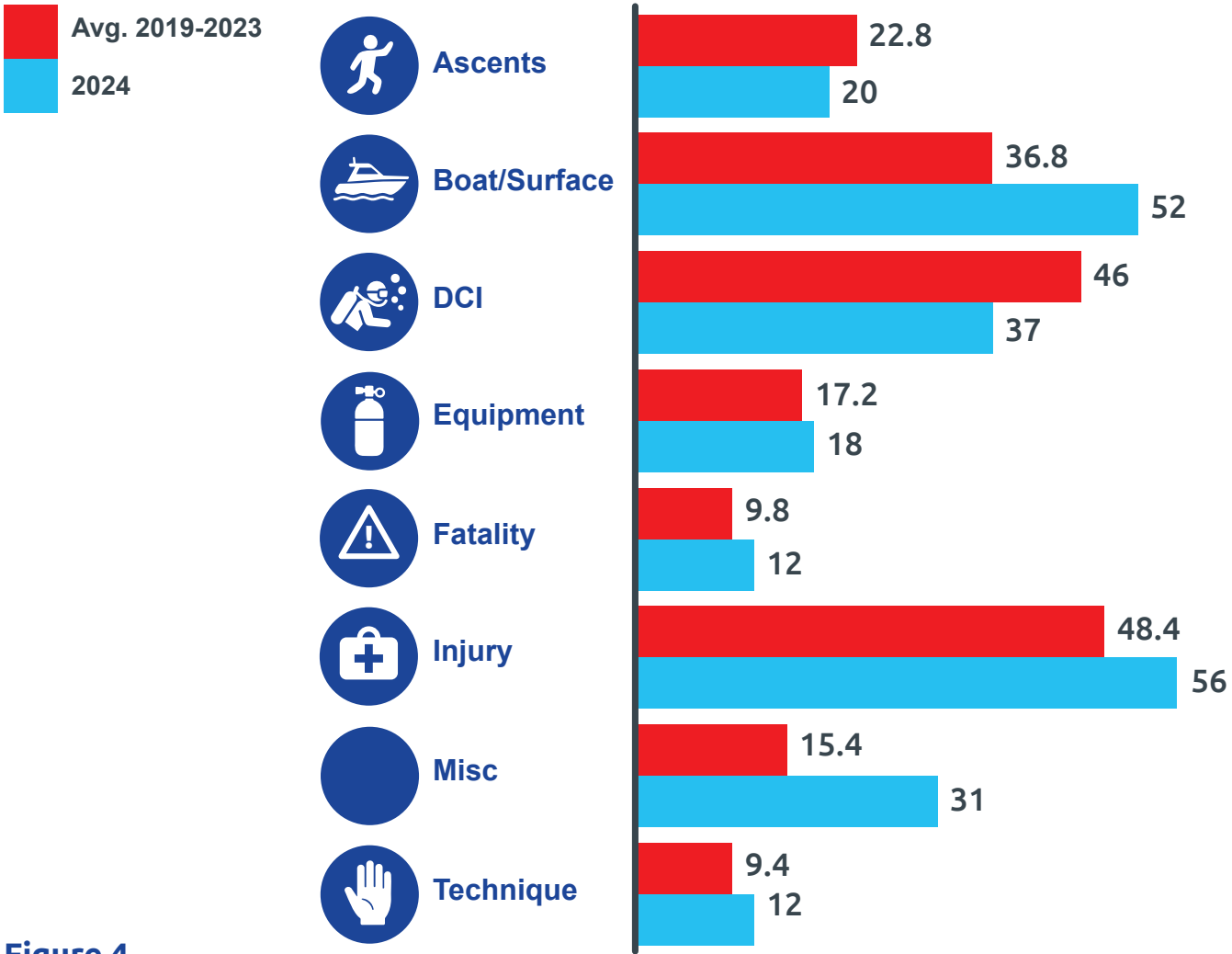


Figure 4
Reported incidents by category

Each incident is assessed to determine the most significant contributing factor. For instance, if a rapid ascent leads to decompression illness (DCI), the incident is classified under the DCI category. Conversely, if a fast ascent occurs without resulting in serious harm, it is recorded as an ascent-related event. Incidents that cannot be clearly attributed to a single cause are placed in the miscellaneous category. The ascent category specifically includes cases where divers have made an abnormal ascent but avoided DCI or other injuries.

In 2024, the distribution of incidents across the various categories remained broadly consistent with previous years, and again we see an increase in cases classified as either miscellaneous or injury. These categories are typically used when insufficient information is available to assign a more specific classification, suggesting an increase in reports submitted with limited detail.

As highlighted in past reports, we continue to receive several accounts of false alarms made with good intent, particularly from the Maritime and Coastguard Agency (MCA). We also note a smaller number of instances where divers received accident-prevention advice. We remain deeply appreciative of the unwavering support from our emergency services, who consistently prioritise diver safety. Early notification of a potential need for assistance - even if later stood down—is always preferable to a delay in triggering an alarm, which may hinder the effectiveness of rescue efforts.

Sadly, there were 12 diver fatalities in 2024; more detail on these incidents is given later in the report.

Incident Depths

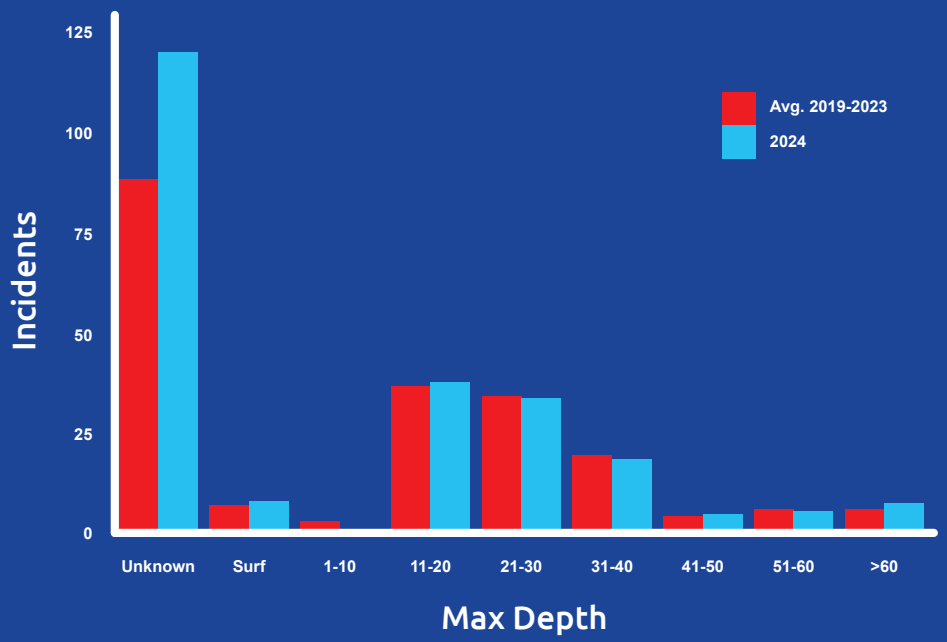


Figure 5
Maximum dive depth (m) in which incident occurred

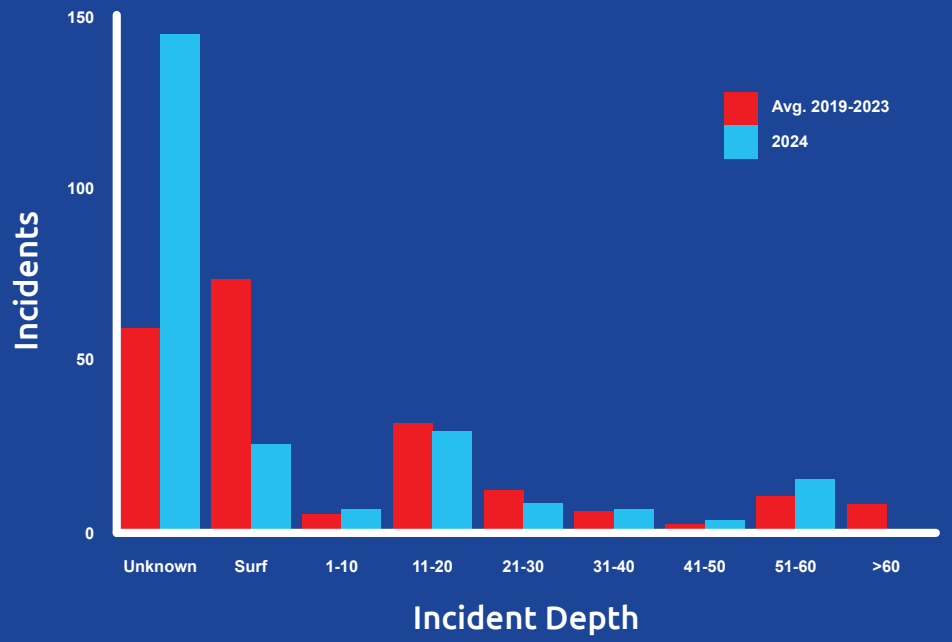


Figure 6
Depth (m) at which incident started

Figures 5 and 6 present data on dive depths associated with reported incidents. Figure 5 illustrates the maximum depth reached during the dive, grouped into 10-metre intervals, while Figure 6 shows the depth at which the incident began. Due to limited detail provided by some emergency services and media sources, a significant number of incidents are categorised as ‘unknown’ in terms of dive profile. This trend has grown in recent years, reflecting an increase in reports submitted with incomplete depth information.

Where depth data is available, the overall distribution remains broadly consistent with previous years. As noted in last year’s report, both figures highlight a continued decline in incidents beginning at the surface, alongside a rise in cases where both the starting and maximum depths are unknown.

Diver Qualification

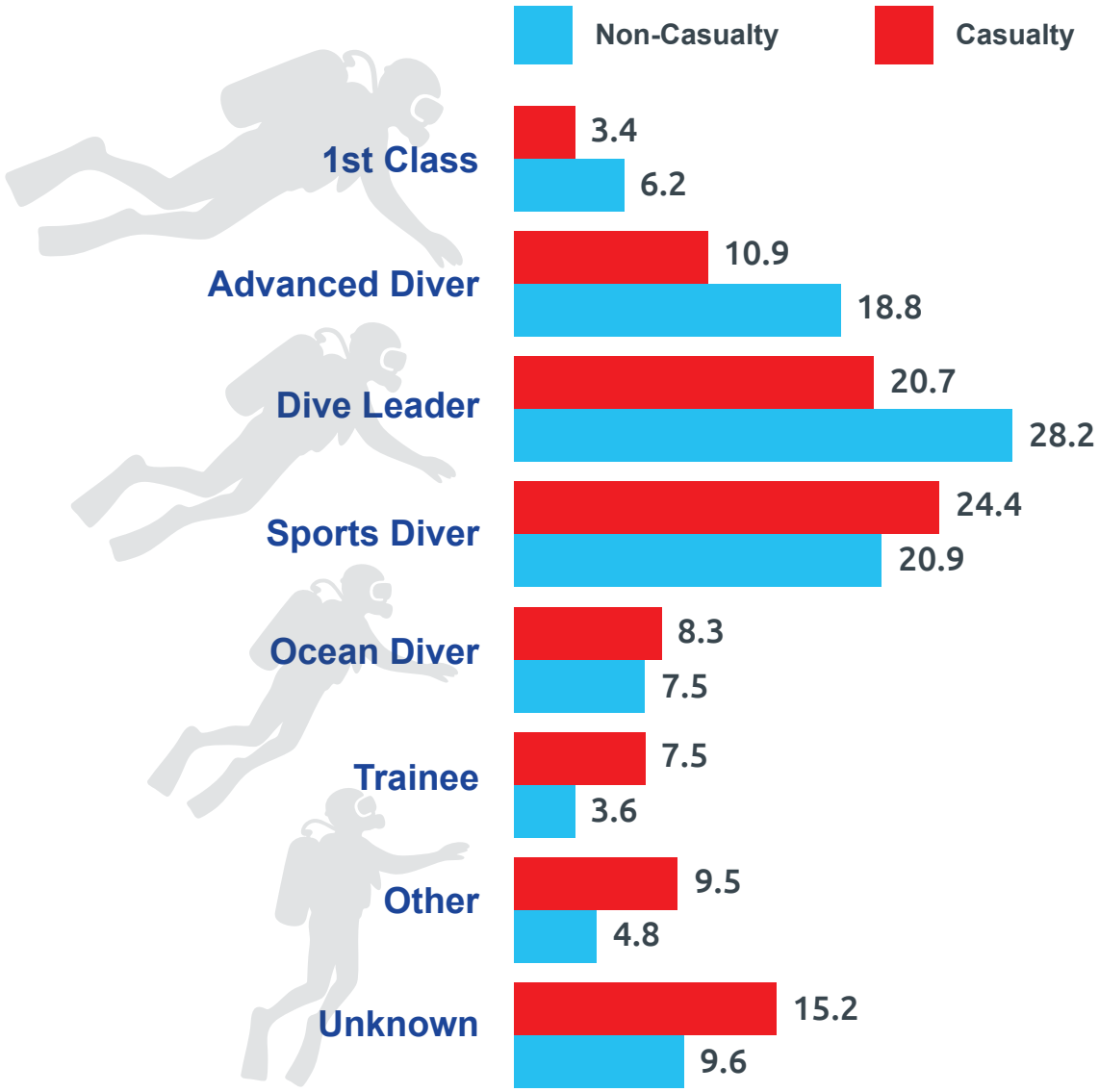


Figure 7
The percentage of BSAC qualification of the divers involved in the incident separated by casualty or non-casualty

In Figure 7, we show the BSAC diving qualifications of the divers who were casualties in incidents in 2024 in comparison with the BSAC qualifications of the divers who were involved. Here we see that, despite Dive Leaders and Advanced Divers being in the minority in the diving population, they are significantly represented in the incident data. One could argue that these divers are diving more often but nevertheless this graph serves as a valuable reminder that, regardless of qualifications or experience, no diver is immune to becoming involved in an incident.

Complacency has no place in diving - our own safety, and that of our buddies, must remain a constant priority, no matter how experienced and qualified we may be.

Divers' Use of Emergency Services

This section highlights the extent to which divers have relied on emergency services - namely the Coastguard, RNLI, and Rescue Helicopters - as shown in Figures 8, 9, and 10. We remain deeply grateful for the vital support these services provide when divers are in need. Incidents involving helicopter recovery often require coordinated efforts between the Coastguard and RNLI, and the seamless collaboration among all three services is greatly appreciated. Once again, we observe an increase in incidents linked to the extended diving season into September, although this year it may not have been driven by unusually favourable conditions. In 2024, the RNLI were called 29 times to help in the rescue of divers. Twenty two of these were in May, June, July, August and September (Figure 9).

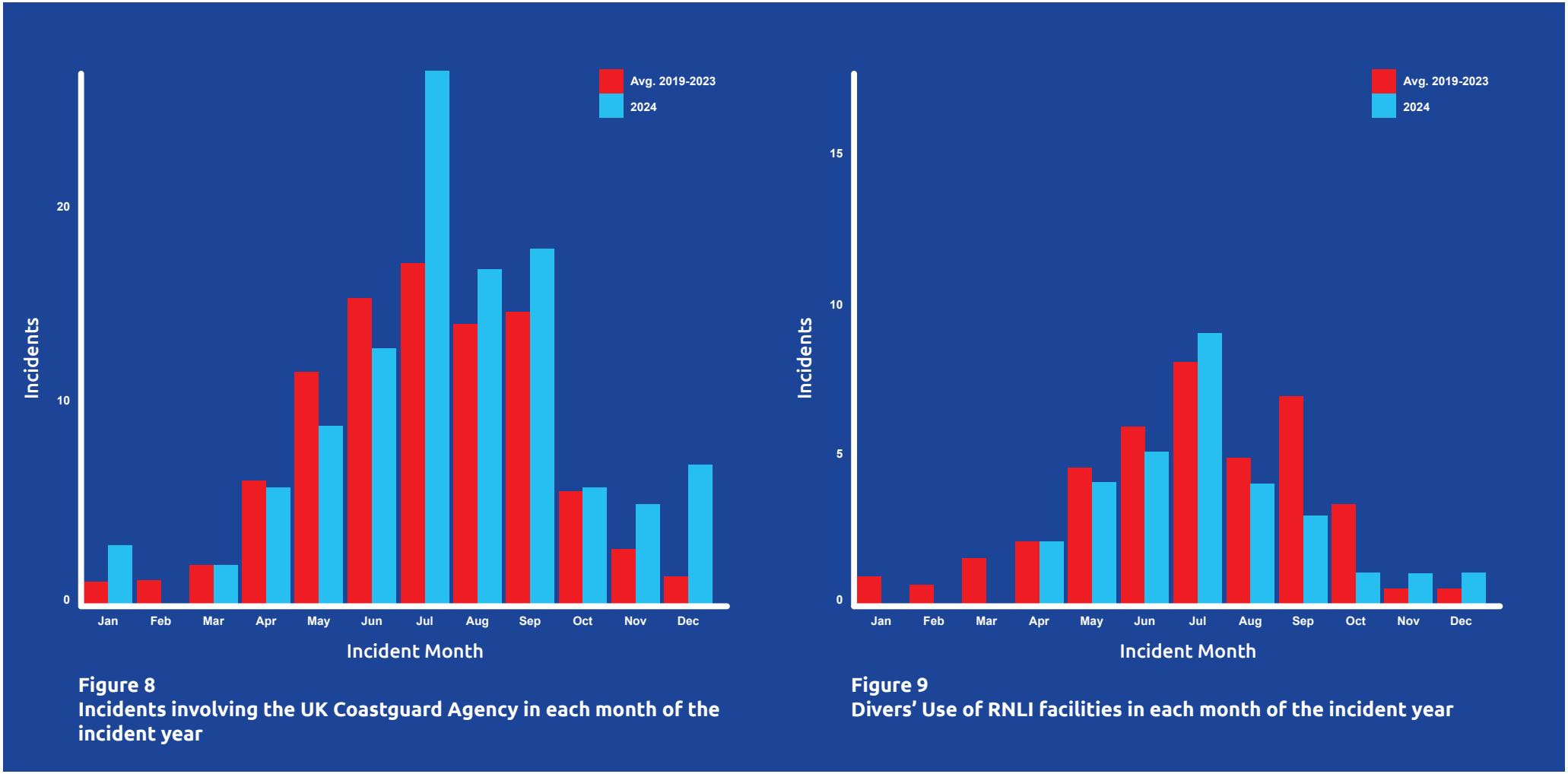


Figure 8
Incidents involving the UK Coastguard Agency in each month of the incident year

Figure 9
Divers' Use of RNLI facilities in each month of the incident year

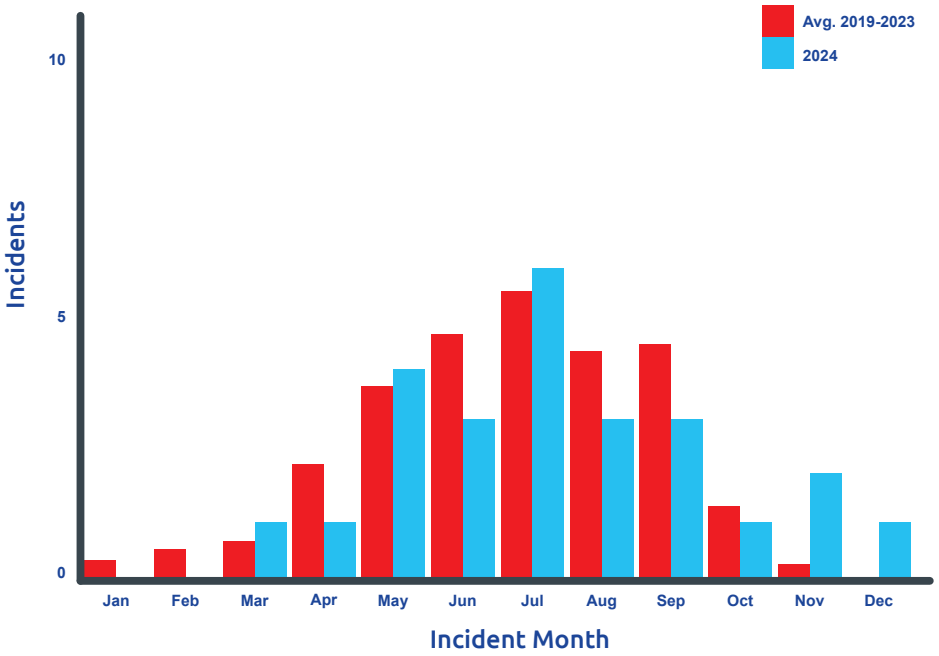


Figure 10
Divers' use of SAR helicopters in each month of the incident year

Also, in 2024, helicopters were called 25 times to help in the rescue of divers. Nineteen of these call-outs were in May, June, July, August and September (Figure 10).

The following graphs 11a and 11b reflect incident rates linked with an indicated causative factor using BSAC membership as a proxy for estimated participation in the sport. Trendlines are a 5-year rolling average.

Figures 11a and 11b seek to account for variability in the data arising from the relatively small number of incidents linked to individual factors, as well as fluctuations in overall diving activity. To identify meaningful trends, BSAC membership figures are used as a proxy for the level of diving taking place in the UK, and incident rates are presented using a five-year rolling average. This approach helps highlight factors associated with incidents that may warrant attention from organisations responsible for developing training programmes and issuing safety guidance.

Figure 11a shows a continued decline in reported incidents involving decompression illness (DCI) and rapid ascents. Where DCI has occurred, Figure 11b provides insight into the relative impact of contributing factors, revealing a reduction in cases linked to dives deeper than 30 metres, fast ascents, and missed decompression stops, leaving repeat diving to be relevant in a growing proportion of the instances of DCI.

This encouraging trend could be correlated with sustained focus on improving buoyancy control and dive planning - measures aimed at minimising the risks associated with deeper dives and ascent-related errors. As the influence of these three factors diminishes, and with most divers now undertaking multiple dives per day, the relative contribution of repeat diving to DCI incidence will become more prominent as an underlying factor.

However, we should not be complacent. On reading the synopses, we can identify 18 instances in the last 2 years where divers have lost control of their buoyancy and ascended feet first or had to abort a dive due to the migration of air to the feet of drysuits and occasionally causing the complete displacement of the fins and drysuit boots from the diver's feet. It is important to ensure that divers are trained in drysuit diving but also that drysuit legs and feet and fins are well fitted to ensure that they do not displace. In addition, we are still seeing cases of underweighted and overweighted divers, and issues of jammed DSMB reels both causing ascent-related incidents.

Figure 11a
Incident rates by Incident class

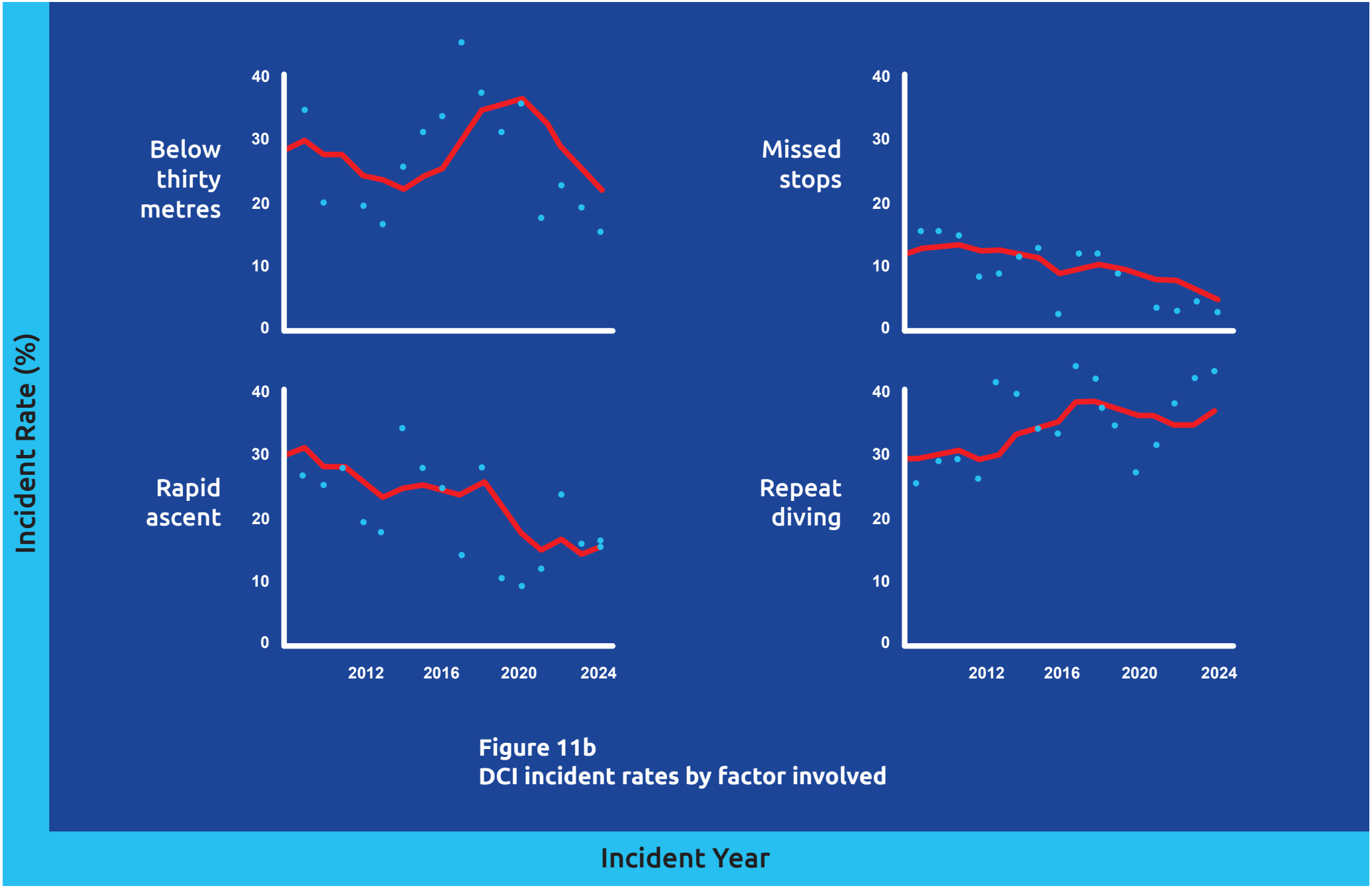


Figure 11b
DCI incident rates by factor involved

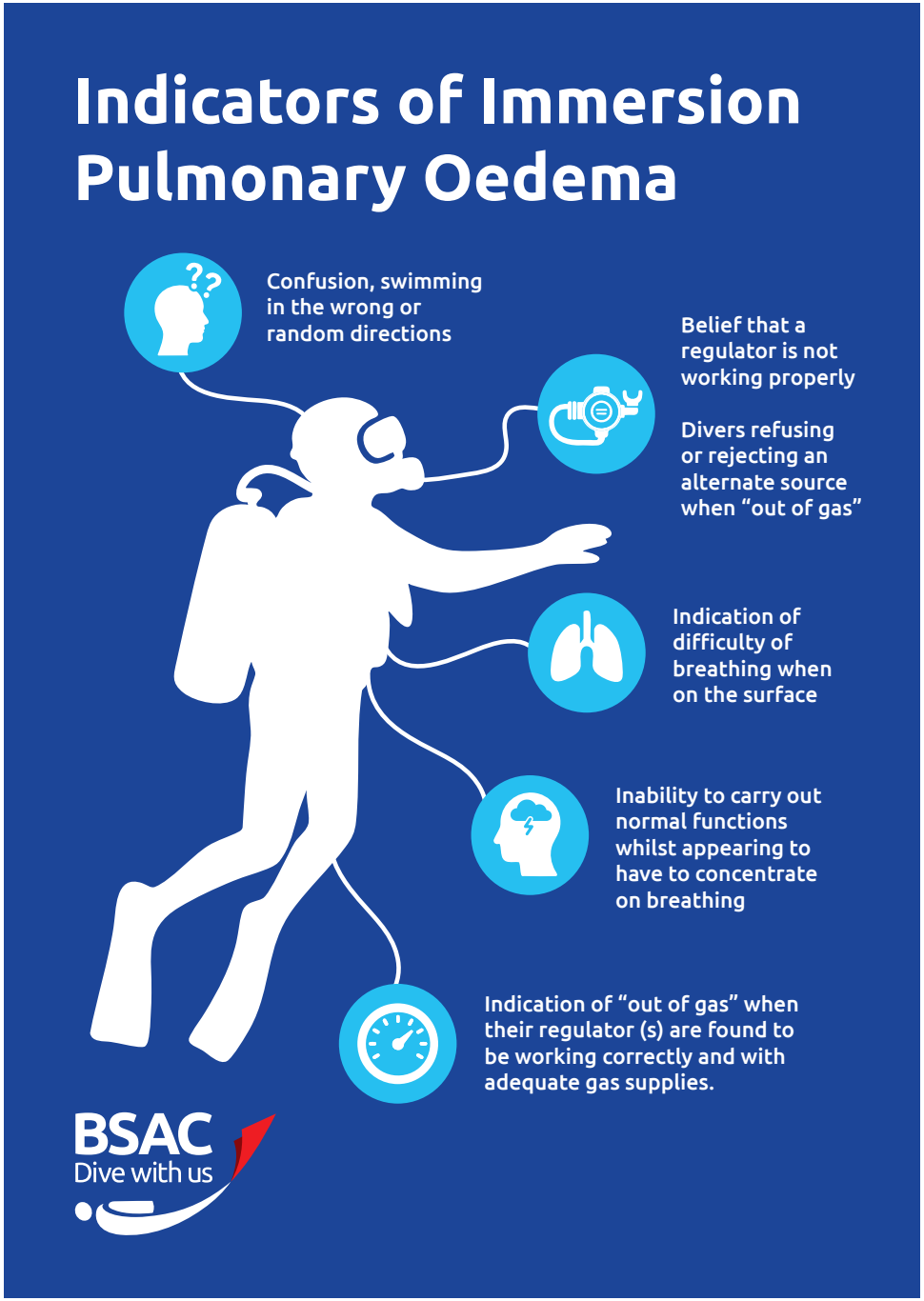
Immersion Pulmonary Oedema (IPO)

Over the last few years, we have refined our approach to identifying incidents where Immersion Pulmonary Oedema (IPO) may be implicated. Each case is now retrospectively categorised as confirmed when professional verification is available, probable when three or more diagnostic criteria are present, and possible when one or two criteria are met.

In some instances, coroner's reports provide new evidence that elevates previously probable cases to confirmed, prompting updates to both the database and the analysis. As a result, Figure 12 may reflect newly reported information from prior years, ensuring our data remains as accurate and current as possible.

The criteria that lead us to believe that an IPO is implicated are:

- Diver is underwater with breathing difficulties when not exercising particularly strenuously. Breathing difficulties indicated by rapid, uneven, or heavy breathing or coughing uncontrollably with or without bloody sputum.
- Indication of difficulty of breathing when on the surface.
- Confusion, swimming in the wrong or random directions.
- Inability to carry out normal functions whilst appearing to have to concentrate on breathing.
- Belief that a regulator is not working properly.
- Indication of 'out of gas' when their regulator(s) are found to be working correctly and with adequate gas supplies.
- Divers refusing or rejecting an alternate source when 'out of gas'.



Although Immersion Pulmonary Oedema (IPO) has long been recognised in military rebreather divers and triathlon athletes, awareness of its occurrence among recreational divers, snorkellers, and open water swimmers is now steadily increasing. Like divers and snorkellers, open water swimmers are now advised not to swim alone, and the community is becoming more mindful of the risks associated with IPO.

Current guidance recommends that anyone experiencing symptoms of IPO during any of these activities should avoid re-entering the water until medical advice has been obtained. It is now well understood that even mild symptoms significantly increase the likelihood of recurrence upon subsequent immersion. A likely instance of such a recurrence can be seen in this incident report (24/111).

Thanks to improvements in training programmes, both diver and medical awareness of IPO continues to grow. Figure 12 shows that since 2010, divers reporting incidents are increasingly recognising and reporting symptoms consistent with IPO, whereas previously, such diagnoses were primarily made by medical professionals. The advice remains clear: if you experience any breathing difficulties underwater, terminate the dive, ascend safely, and exit the water. If you observe signs of IPO in a buddy, assist them from the water as safely and promptly as possible. Once ashore, the individual should be seated, administered oxygen, and assessed by medical professionals. It is very important to get medical advice to eliminate an IPO before diving again. Early recognition of IPO symptoms is key to preventing escalation and ensuring diver safety.

In addition, we are seeing more medically confirmed instances of IPO in 2024, reflecting increased awareness of the condition in the medical community.

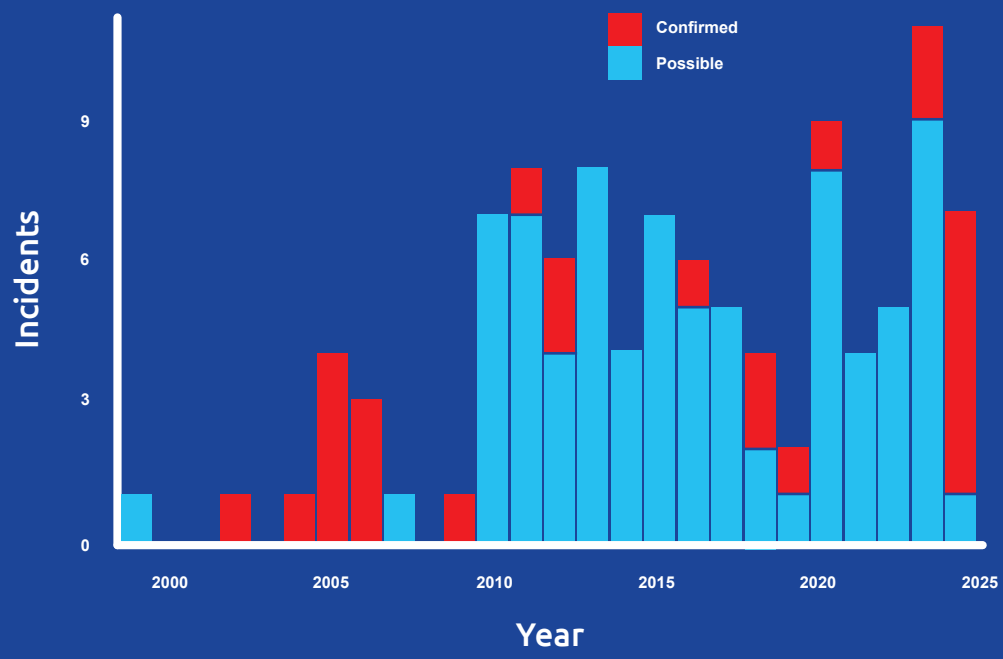


Figure 12
The frequency of confirmed and probable cases of IPO 1997 to 2024.

Fatalities

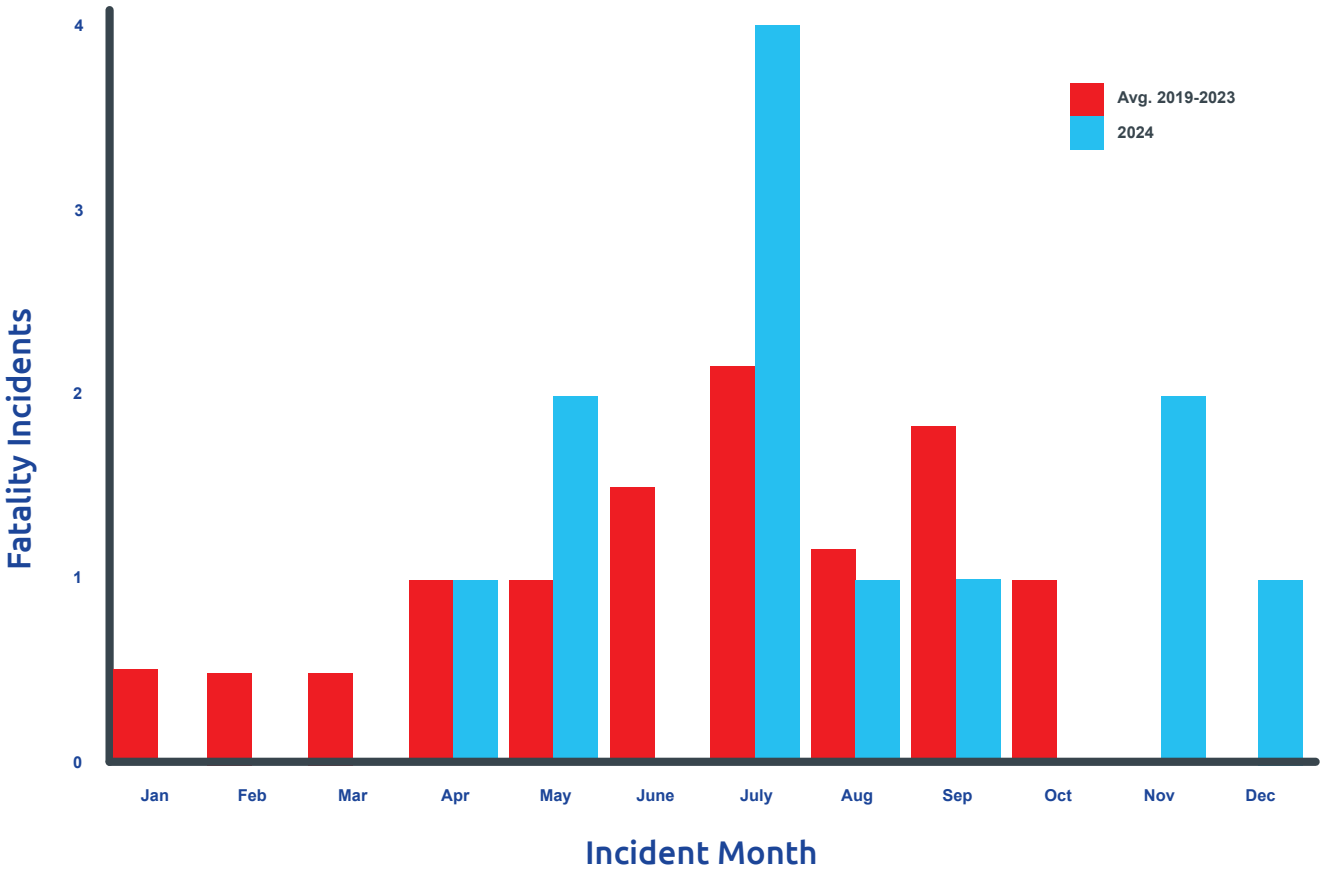


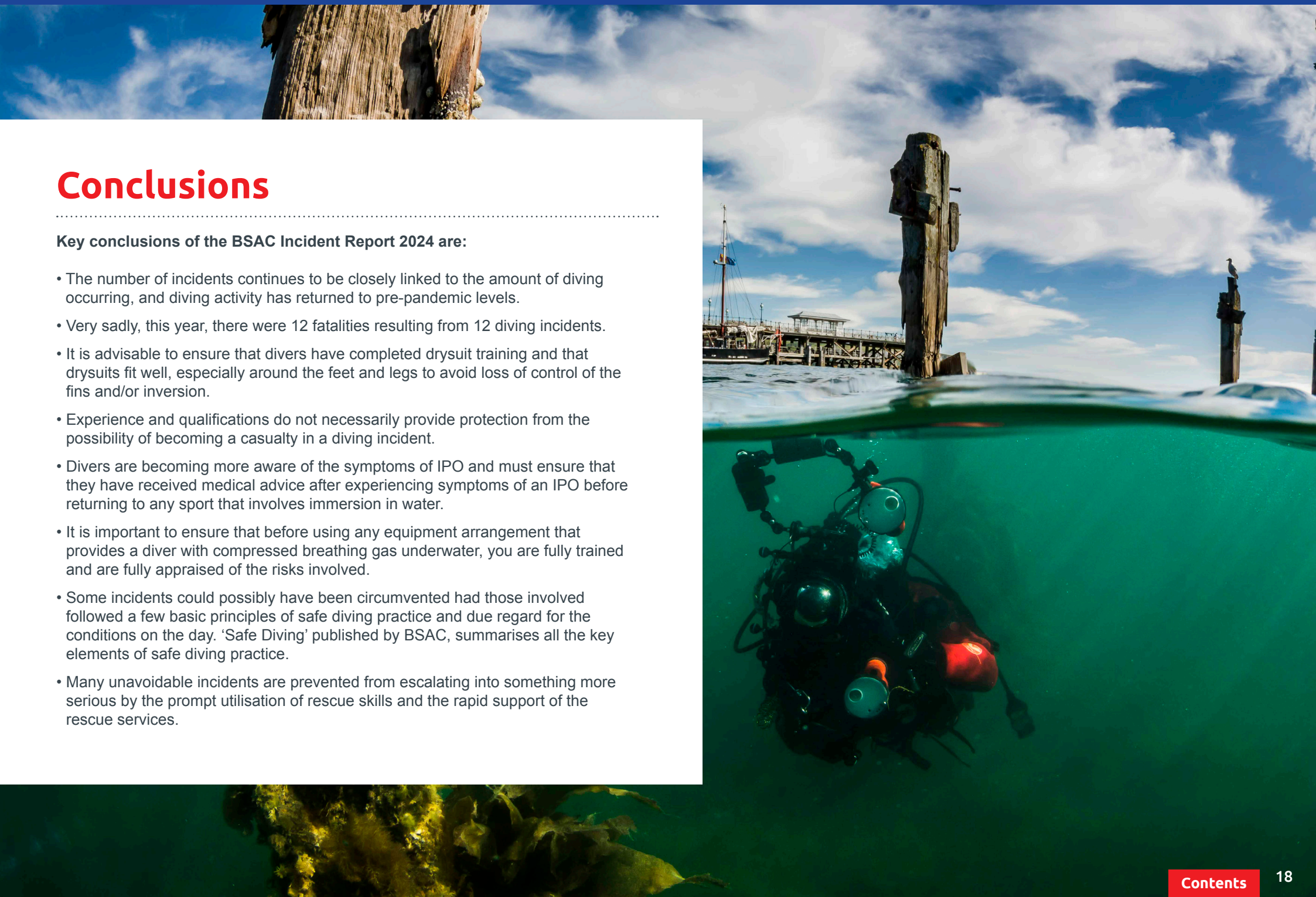
Figure 13
Fatal incidents in 2023 by calendar month compared to previous 5 years

Sadly, 12 fatal incidents occurred in the UK during the 2024 incident year, involving the death of 12 divers.

Figure 13. shows the fatalities by month compared to the average by month for 2018-2022. Analysis of the fatal incidents showed that the average age of the people who died was 57.4 years, and half of the fatalities involved either solo diving or separation underwater.

In recent years we have seen a range of unconventional diving equipment configurations being offered on the internet. Of note is equipment where small battery-operated compressors are mounted on floats above the diver and deliver air to second stage regulators on 9-12m long hoses. Like all diving equipment this equipment is readily available online.

UK diving organisations and the British Diving Safety Group have all expressed significant concern over the efficacy of such equipment for use even in shallow depths. Sadly, this year we have identified one fatality (24/109) involving such equipment, further emphasising such concerns. Whilst information relating to the incident is very limited, there is no indication that the person had any formal diver training, and the person was also diving alone.



Conclusions

Key conclusions of the BSAC Incident Report 2024 are:

- The number of incidents continues to be closely linked to the amount of diving occurring, and diving activity has returned to pre-pandemic levels.
- Very sadly, this year, there were 12 fatalities resulting from 12 diving incidents.
- It is advisable to ensure that divers have completed drysuit training and that drysuits fit well, especially around the feet and legs to avoid loss of control of the fins and/or inversion.
- Experience and qualifications do not necessarily provide protection from the possibility of becoming a casualty in a diving incident.
- Divers are becoming more aware of the symptoms of IPO and must ensure that they have received medical advice after experiencing symptoms of an IPO before returning to any sport that involves immersion in water.
- It is important to ensure that before using any equipment arrangement that provides a diver with compressed breathing gas underwater, you are fully trained and are fully appraised of the risks involved.
- Some incidents could possibly have been circumvented had those involved followed a few basic principles of safe diving practice and due regard for the conditions on the day. ‘Safe Diving’ published by BSAC, summarises all the key elements of safe diving practice.
- Many unavoidable incidents are prevented from escalating into something more serious by the prompt utilisation of rescue skills and the rapid support of the rescue services.

Fatalities

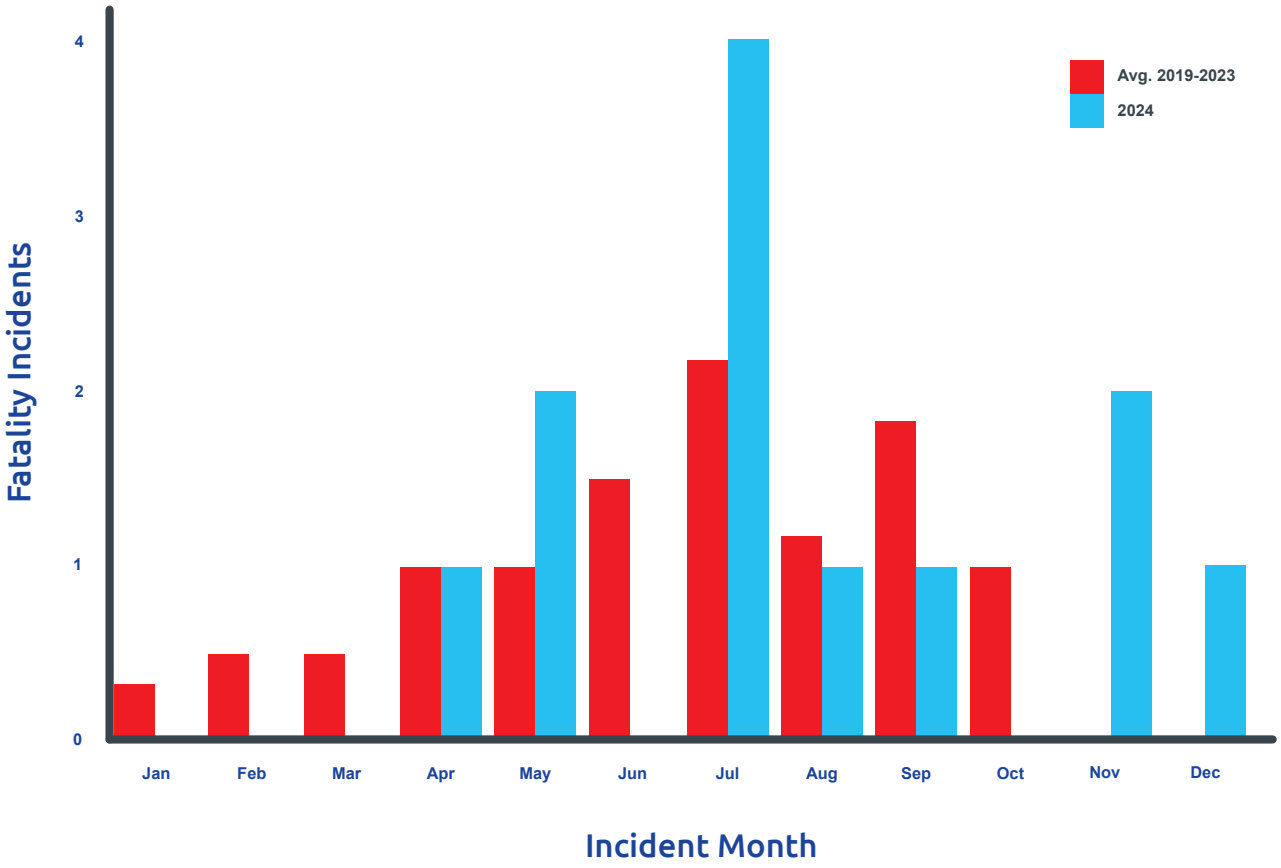


Figure 14
The month of occurrence of fatalities

April 2024 **24/212**

A diver had completed a dive from the shore for 60 min. Later the same day, the diver conducted a second dive alone to a maximum depth of 9m and surfaced after 60 min, but was not seen surfacing. The diver was eventually spotted floating face up 15m from shore and did not respond to shouts. Another diver swam out and pulled him to shore and commenced CPR and used a nearby defibrillator, but the diver was declared deceased when the emergency services arrived. An inquest found that the diver had suffered from high blood pressure, was in remission for diabetes and was taking medication for an underactive thyroid. A post mortem found that the diver had enlarged heart and had an acute cardiac event as a result of undiagnosed heart and liver conditions. (Media report only).

May 2024 **24/034**

A diver separated from his buddy before their planned ascent time. He failed to surface and his DSMB was later recovered locked off at 18m. An extensive surface search over two days failed to find any evidence of the missing diver. (Coastguard and RNLI report).

May 2024 **24/035**

A diver using a rebreather entered the water with his buddy for a dive on a wreck at a depth of 30m. On entering the water, the pair swam to the shotline where the diver told his buddy he was not happy with his kit and he did not want to complete the dive. The diver advised his buddy to join another pair of divers and that he would remain on the surface and return to the boat. The buddy descended with the other divers. The skipper saw the diver waving that he had an issue and brought the boat alongside the shotline. He could see the diver holding onto the buoy to stay afloat and had some of the shotline tangled in his rebreather. At this point, the diver did not have his loop from the rebreather in his mouth. The skipper managed to remove the line with a boathook and was helping the diver towards the lift when his buddy resurfaced nearby. The shotline rope caught the diver's rebreather again and the skipper was unable to disentangle it again as the boat was moving away from the shotline with the current. The diver let go of the boat and as he did so he slipped under the water. Another dive boat was in the area with divers down on the wreck. Shortly after the diver sinking, a lifting bag appeared on the surface. A diver from the second boat had come across the diver on the bottom. He found him face down and unresponsive on the bottom with the loop out of his mouth. He tried inflating the diver's BCD but found it would not inflate. He then tried to inflate the diver's drysuit but found this was not attached. The diver then attached a lifting bag and sent the unconscious diver to the surface. The skipper of the second boat found the lifting bag was attached to the missing diver and he recovered him aboard. Two divers then transferred to the second boat, taking a defibrillator with them and assisted with CPR using the defibrillator until a helicopter arrived to transfer the diver to hospital. The diver's drysuit hose was not attached and his diluent cylinder was not turned on. The police later confirmed that the diver had died.

July 2024 **24/053**

A diver was seen to surface in distress. He was recovered aboard a charter vessel, assisted by the crew and another diver, was put in the recovery position and placed on oxygen. Despite monitoring and support, the diver's condition deteriorated with signs of respiratory distress, and became unresponsive. The Coastguard was alerted, who tasked a helicopter. CPR was administered for about 20 min until the helicopter arrived. The diver was subsequently declared deceased at hospital. Examination of the diver's computer indicated that he had switched from his bottom gas of air to his decompression gas of nitrox 50 and switched gases on both computers, spending several min shallower than 20m on nitrox 50. The diver then made a rapid ascent to the surface, omitting 4 min of required decompression stops. The diver was believed to have had a history of heart attacks.

July 2024 **24/055**

Two divers prepared to dive a wreck from a charter boat, both using nitrox 32. One diver had borrowed a mask from his buddy to see if it would help his vision as the mask had 1.75 lens fitted. The pair entered the water and started to descend down the shotline. The diver paused after a few metres as he had a little difficulty clearing his ears, but then descended to the wreck at a depth of 27m. After checking gas, the pair headed towards the stern, keeping to the top of the wreck. After about 27 min, the diver indicated he was down to 80 bar, which was the point they had agreed to ascend. His buddy deployed his DSMB but the reel jammed and so he let it go. The diver got his DSMB out and started to inflate it whilst the buddy held the reel. The DSMB deployed successfully and the buddy started to ascend but realised the diver had not. When he looked down, he could see the diver looking for him and so he descended and attracted the diver's attention and they started ascending together. As they reached 6m, there was quite a lot of line out from the DSMB and the buddy had got some wrapped around him. The diver swam over to pull some of the line from around the buddy's second stage and then went behind him. During this time, the buddy realised they had started to drift down and so put some air into his BCD and gave a little kick with his fins. In doing so, he felt he kicked something and looked down to see the diver's DSMB reel near his fins and there was no sign of the diver. He could see a column of bubbles coming from below, which resembled bubbles from a free flow rather than breathing. The buddy had drifted up towards the surface and expected to see the diver coming back up using his pony cylinder, but when he didn't appear, the buddy descended following the stream of bubbles down. The bubbles stopped around 26m and the buddy continued to the seabed at 31m and looked around, but could see no sign of the diver. He checked his computer and saw he had no decompression requirements and so decided to ascend directly to the surface, omitting any safety stops, expecting to see the diver on the surface. On surfacing, there was no sign of the diver and so the buddy gave an emergency signal to the boat which came to pick him up. A watch was kept on the surface for signs of the diver surfacing, with other divers recovered as they surfaced but there was no sign of the missing diver. The Coastguard was alerted and they tasked two lifeboats to join the dive boat in a surface search for 4 hours but no sign of the diver was found and the search was called off.

July 2024 **24/057**

A diver and her buddy were the last pair of divers in a group to enter the water. During the descent, both divers were caught in a vortex and the diver's buddy lost sight of her as she sank away without her regulator in her mouth. After reaching 16m, the buddy inflated her BCD and surfaced rapidly and raised the alarm. Her computer registered less than 5 min underwater and she was

monitored but no signs of DCI occurred. The boat crew alerted the Coastguard about the missing diver and a large scale surface search was made by RNLI lifeboats, rescue helicopters and other surface vessels but no trace was found of the missing diver.

July 2024 **24/066**

A diver using a rebreather was reported missing after a dive by the charter vessel calling the Coastguard. The Coastguard tasked several lifeboats, a Coastguard helicopter and a fixed wing aircraft, and other vessels in the area joined the search, but no sign of the missing diver was found. The search was called off around 2300. The next day divers from the group dived the location and located and recovered the missing diver. (Media report only).

August 2024 **24/183**

A diver and her buddy were part of a dive group using a charter vessel and were on the first dive of the trip. The pair descended to a maximum depth of 18m and the dive progressed as normal, including regular gas checks. After about 23 min, the buddy checked the diver's gas and she indicated she had 80 bar remaining, which corresponded to their agreed plan to start their ascent. The buddy signalled to head towards a flatter area in order to deploy a DSMB. During the ascent, the pair became separated. The buddy retraced his route, and after a few min, he located the diver kneeling on the seabed facing away from the reef at approximately 20m. Initially the buddy was unable to get her attention until he touched her shoulder, at which point she turned slowly around and responded with an OK signal and indicated she had 50 bar gas remaining. The Buddy, deployed his DSMB, with assistance from the diver as they had planned, and commenced their ascent. The pair conducted a normal ascent between 20m and 12m, at which point the diver let go of the line and started to descend, not making any effort to control the descent. The buddy descended after the diver, reeling out the DSMB line as he went to maintain contact with the surface. He grabbed hold of her and started to bring her to the surface. The buddy noted that the diver had her eyes open and was breathing but was making no effort to help herself. The ascent stopped at 6m and the buddy was unable to put more buoyancy into the diver's BCD and so attempted to inflate his own BCD. But this was complicated by the pair having become entangled in the DSMB line, which had pulled his inflator hose behind his head. The buddy eventually reached the inflator and brought them both to the surface. On the surface, he inflated his BCD but was unable to get the diver fully above the surface and noted that she was no longer showing signs of breathing. The buddy signalled the boat, which was recovering another pair of divers, and then orally inflated the diver's BCD. The boat came alongside and the buddy shouted that the diver was not breathing. Another diver who had just got back aboard the boat jumped back in the water to assist the buddy to get the diver back aboard the boat. The diver was recovered aboard and CPR was commenced whilst the skipper and crew recovered the remaining divers and contacted the Coastguard and then made way back to harbour. An AED was attached to the diver but did not detect any rhythm and did not advise any shock for the duration of the journey to harbour. The journey to harbour took 45 min, and on arrival, care of the diver was taken over by paramedics, Coastguard rescue helicopter and shortly after a medical helicopter with specialist doctors aboard, but the diver did not recover and was declared deceased by the specialist doctors.

September 2024 **24/087**

A diver was reported overdue and failed to surface following a dive using a rebreather. The Coastguard tasked three rescue helicopters and two lifeboats to search and was further assisted by other nearby boats. The search was called off and assets stood down at 9.30 pm. The body of the missing diver washed up on a beach 11 weeks later.

November 2024 **24/106**

A rebreather diver was asked to buddy with an instructor and student on a wreck diving course. The trio conducted a dive without incident in the morning. After a surface interval of 63 min, the group conducted a second wreck dive at a depth of 20m. Whilst on the wreck, the instructor noticed the rebreather diver had bailed out onto his bailout regulator and was not on the loop. The diver signalled to ascend and the trio ascended the shotline to a safety stop at 6m. As they completed their safety stop, they saw the diver descending without a regulator in place and the instructor responded and brought the diver to the surface and raised the alarm. The instructor inflated the diver's BCD but the diver was unresponsive when the site rescue boat arrived. They helped recover the diver aboard and returned him to shore and called the emergency services. CPR had been commenced in the boat and continued once ashore, and a pulse was regained and he was kept on oxygen. Air and road ambulances arrived within 15 min, and the unconscious but breathing diver was taken to hospital by land ambulance and treated in ICU. The diver passed away five days later.

November 2024 **24/109**

A major search exercise was conducted for a missing diver after diving equipment designed to supply compressed air from the surface to a diver breathing from a long hose was found on the surface and the diver's car was located nearby. The diver's body was found on a beach nine days later. (Media report only).

December 2024 **24/231**

A dive organised by a dive centre to celebrate the end of the year resulted in an incident when a diver went missing. After descending together and descending to a maximum depth of 18m, the group realised the diver was unaccounted for once they surfaced. Some members swam back to search for the missing diver. Two divers from another group eventually found him unresponsive and brought him to the surface. The centre owner assisted by inflating the diver's BCD and calling for help. A rescue boat recovered the diver, whilst the centre owner swam the equipment back to shore. Despite attempts at CPR and the arrival of medical professionals, the diver was pronounced dead. Police collected statements and evidence at the scene.

Decompression incidents

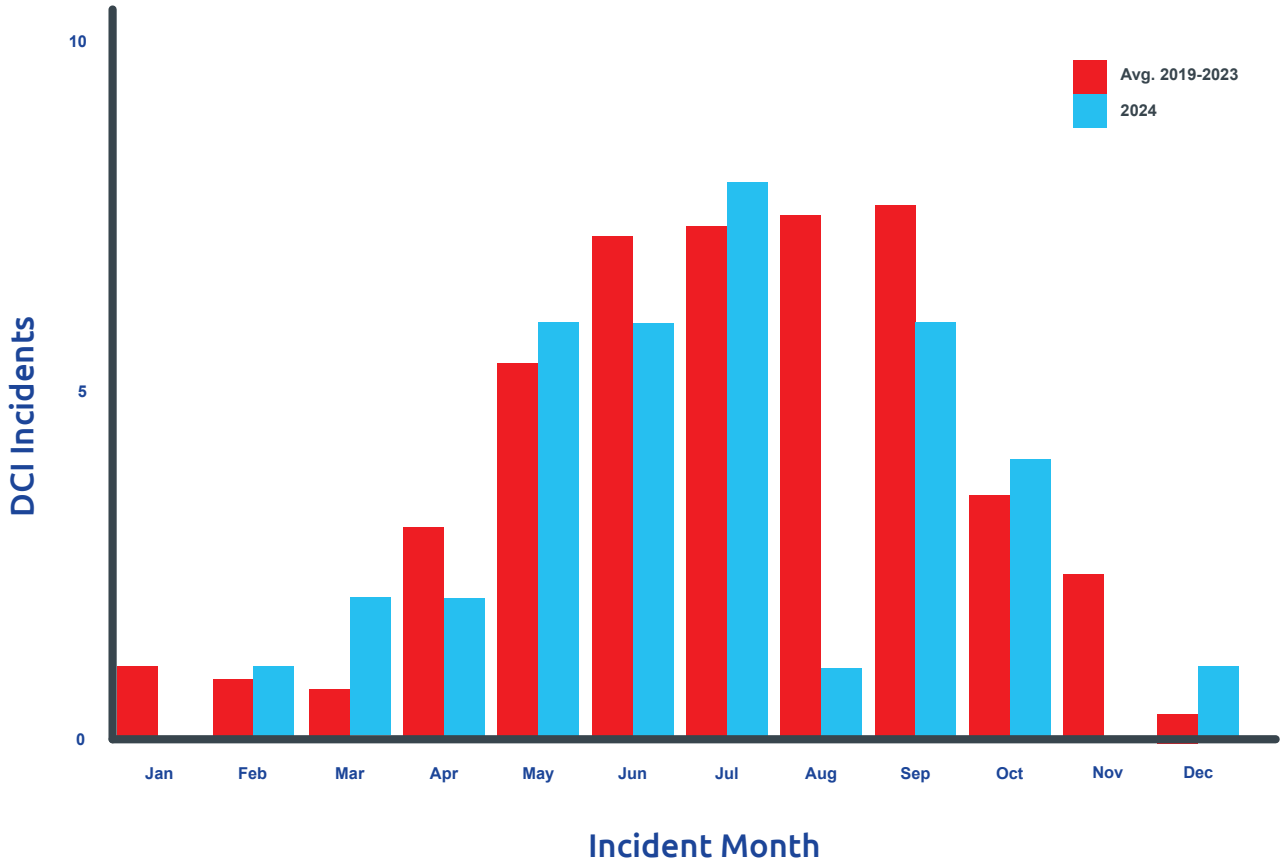


Figure 15
The month of occurrence of DCI

February 2024 **24/007**

A diver was on a dive with a dive leader to a maximum depth of 20m. Around 19 min into the dive and at a depth of 18m, the diver started to experience gas migrating into the feet of her drysuit, and as her feet began to rise, she started to ascend. Her buddy grabbed hold of her wrist and tried to slow her ascent by venting all the gas from his own drysuit but was unable to halt the ascent, and he lost contact at around 8-10m and the diver ascended feet first direct to the surface, omitting a safety stop. On surfacing, her buddy signalled the site rescue boat to pick the diver up as they were a distance from the exit point and he didn't want her to swim back. Once back ashore, the diver was placed on oxygen for 25 min and she appeared fine with no signs or symptoms of DCI. The diver was advised to monitor for any symptoms developing over the next 24 hours. The next day, the diver began to experience symptoms of DCI and contacted a recompression chamber and she was advised to attend for treatment.

March 2024 **24/059**

A diver using nitrox 31 had completed a first dive to a maximum depth of 35m for a total duration of 67 min, including switching to nitrox 78 at 10m for decompression stops at 9m for 1 min and 6m for 17 min. After a surface interval of 122 min, the diver entered the water with a different buddy, this time using air as the dive centre had run out of oxygen for blending nitrox. The pair descended to a maximum depth of 35m following a descent, and spent 5 min at depth before a slow ascent to 6m where they completed a 6 min safety stop and took 3 min to ascend to the surface, with a total dive time of 36 min. The diver returned home, and whilst running a bath some 4-4.5 hours later, he began to experience some itching on his chest and stomach. During the bath the itch became uncomfortable and changed colour to black and blue mottling. The diver contacted a recompression chamber, and whilst he explained his symptoms, the discomfort had subsided and the discolouration changed to red rather than black and blue. The doctor called back and advised the diver to attend the chamber. An assessment found no CNS deficit and the other symptoms resolved during treatment in the chamber.

March 2024 **24/020**

A diver and his buddy had completed a first dive to a maximum depth of 31m for a total duration of 50 min, including a safety stop for 3 min at 5m. After a surface interval of 96 min, he completed a further dive to a maximum depth of 25m for a total duration of 52 min, including a safety stop for 3 min at 5m. After a further surface interval of 82 min, the pair conducted a final dive for the day to a maximum depth of 34m for a total duration of 24 min, including a safety stop for 3 min at 5m. The diver and his buddy had both used nitrox 27 for the first dive and nitrox 32.5 for the second, and the buddy had carried a stage on nitrox 50 which he used from 18m to the surface on all dives. For the third dive, the diver had used air whilst his buddy used nitrox 33. On the third dive, the pair had planned for a no stop dive but the diver's computer just entered deco after 10 min but the stops cleared as they reached 18m during the ascent. Both divers felt fine after the three dives and they contacted each other early evening to check further all was OK. The following morning, the diver woke with a headache, which was unusual for him, and felt quite tired but went to work as usual. Later that day, around 24 hours after surfacing from the last dive, the diver developed a dull ache and tightness in his upper back between the shoulder blades. This was unusual for the diver but he had moved dive gear around the garage after the last dive and so assumed it was related. Around the same time he started to experience some tingling in the ring and little fingers of his right hand, which was something he had experienced previously due to repetitive strain injury, treated with carpal tunnel surgery. The next morning, the diver still had the previous symptoms and had developed an additional dull ache in his left arm bicep and ache in his right hip during movement. The diver contacted a diver helpline and was advised to attend a recompression chamber for assessment and additional symptoms had occurred by the time he arrived at the chamber. A physical examination found no obvious neurological symptoms but due to the dives conducted and the symptoms, he was advised to undergo treatment in the chamber. He received a US navy table 6 treatment with a 20 min extension with resolution of the most recent symptoms, and received a further 2 hour treatment the next day with further resolution of symptoms. A further 2 hour treatment the next day resulted in full resolution of symptoms and he was discharged with the advice that he would require a full diving medical after a month before returning to diving. His buddy experienced no symptoms.

April 2024 **24/225**

An intern was assisting with an open water course as part of her training development. During the first dive, she aborted the dive when her BCD started self-inflating at 6m. She waited at the surface with an instructor until the rest of the group surfaced. She conducted two further dives without incident and appeared completely fine at the end of the day's diving. However, later in the afternoon she contacted the dive centre to report a rash on her chest and upper arms. She was met by the centre owner at 1730, and after assessment, she was placed on oxygen for 30 min. The rash didn't seem to improve, and she then went on to nitrox 80 for 20 min whilst she spoke with a recompression chamber, who recommended that she go in for assessment. She was driven to the chamber by the centre owner, where she was met by the team and assessed. She received a 4-hour recompression treatment and was discharged later that evening.

April 2024 **24/224**

A student was on a training course and had completed the first two open water dives without incident on the first day. The next day, during the 3rd open water dive, the student panicked during a mask clearing exercise and surfaced with her instructor, without triggering any ascent warnings. During the next dive, the student was at a depth of 17m when he signalled out of gas and was provided a AS by another instructor. The pair then conducted an AS ascent, including a partial safety stop at 5m. On surfacing, the student reported discomfort and potential suit squeeze on the surface. The instructor towed the student back to shore and monitored him for DCI signs, but the student showed no visible symptoms and said he felt fine. The student chose not to dive again that day and relaxed instead. Two days later, the student contacted the dive centre to report suffering from cramps, headache and fatigue, resulting in the student being referred to a recompression chamber for treatment. The student received a 6-hour treatment with a follow

up one-hour treatment the next day, and was advised to refrain from diving for 6 weeks.

May 2024 **24/283**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

May 2024 **24/029**

A qualified diver had conducted a series of dives over three days. Day 1 - 14m for 43 min, and after a surface interval of 203 min, 11m for 12 min. Day 2 - 7m for 39 min, and after a surface interval of 278 min, 11m for 39 min. Day 3 - 13m for 41 min. All dives had included a 3 min safety stop and no decompression limits were reached. On the fourth dive, the diver's drysuit had flooded but she decided to continue the dive. On completion of the fifth dive, the diver felt fine; however four hours later, she reported she felt tired but not unwell, and shortly afterwards travelled home by road as a passenger. When they stopped for food 4 hours later, the diver noticed a mild skin rash and was itchy when she visited the toilet. Two hours later, whilst still being driven, she thought she was feeling travel sick. On arrival at the club equipment store, the diver started to experience a headache and feel slightly nauseous. They felt well enough to help unpack but were advised to rest instead. After 50 min, the diver started to feel more nauseous and wanted to sit down; the person who had been driving called the trip manager and the diving officer who headed to the dive store. 10 min later the diver showed reduced awareness and the diver emergency helpline was called. During the consultation, the doctor requested the diver stand and their balance was found to be severely impaired and she started to feel dizzy. The diver was placed on oxygen but was not inhaling strongly enough to consistently trigger the supply. This was noticed and she was switched onto continuous supply. The diving doctor advised attendance at a recompression chamber and the diver was able to walk to the car but had limited awareness of the situation. She was driven to the chamber, kept on oxygen and monitored throughout the journey. During the journey, the diver started to complain about mild abdominal pains but their awareness of the situation had improved. Half an hour later, the diver started to complain of middling to mild chest pains but the abdominal pain had subsided. The rash was still present and she felt unwell. On arrival at the chamber, the diver was assessed and received treatment in the recompression chamber, with a follow up treatment the next day.

May 2024 **24/105**

A diver had completed a first dive of the day from a boat to a maximum depth of 20m and a total duration of 38 min, including a safety stop at 6m for 3 min. After a surface interval of 94 min, the diver and his buddy entered the water for a dive to a maximum depth of 24m. 18 min into the dive at a depth of 22m, one of the diver's weight pouches dropped out. It contained 5 kg out of a total of 14 kg weights. The diver dumped as much air as he could from his BCD and suit but nevertheless rose steadily, taking 2 min 17 sec to reach the surface and was unable to make any stops. The diver felt okay after the second dive, but the next morning at home he woke with faint 'pins and needles' in his right hand and barely perceptible numbness in right forearm and cheek. At first the diver thought he might be imagining it as it was so slight; also his right wrist was plated after a fracture 15 years ago and he had some arthritis in his right hand, so some discomfort there was not unusual. However, the diver rang the DCI Helpline and was advised to go to a recompression chamber for assessment. The doctor at the unit assessed the diver which went okay apart from a balance test which he failed miserably. The diver went into the chamber for 5 hours that evening. The diver's symptoms resolved, however he had a further 2 hours treatment in the chamber the following morning. The doctor advised the diver not to fly or dive for 6 weeks and to see a sports diving medical referee. The referee found no medical issues but suggested the diver have a PFO test in case that was a contributing factor. The PFO test was clear and the diver resumed diving.

May 2024 **24/210**

An instructor had conducted two training dives with two students the previous day (Linked to incident 24/110). The next day, he took two different students for training; the first dive to carry out controlled buoyant lift and AS training to a maximum depth of 15m and a total dive time of 39 min, and, after a surface interval of 120 min, the second for an exploratory dive to a maximum depth of 20m for a total duration of 28 min. There were no abnormal occurrences on either dive. The following afternoon, the instructor noticed a deep but relatively mild pain in his shoulder joints. Following a consultation over the phone with a recompression chamber, the diver was driven to the chamber by a friend. Following examination, the diver received a recompression treatment, with the pain relieved fairly quickly on compression. The diver did not require any follow up treatments and was signed of as fit to dive one month later.

May 2024 **24/075**

A newly qualified diver was buddied with two experienced divers for a boat dive on a wreck at a maximum depth of 16m. One of the experienced divers lost a fin on entering the water and was given a spare pair. She had some difficulty descending the shotline but did not ask for any additional weight. After 26 min, the boat crew saw the newly qualified diver surface feet first from an uncontrolled ascent. He was on the surface for around a minute before the diver who had lost a fin surfaced, appearing to be in control. The boat crew were concerned for the diver as he was lying face down, but they were unable to approach as the third diver was still underwater. Once the third diver

surfaced, having completed his safety stop, the boat approached to recover all three divers, with three crew available to help them de-kit and recover aboard. During this time, another pair of divers surfaced. The diver who had lost the fin reported that she had suffered cramp when she first tried to fin up into the boat. The crew allowed her a little time to recover, and then all moved to the same side to tilt the boat, and she was able to board on a second attempt. Once all three divers were aboard, the boat moved to collect the other pair. The two who had surfaced early explained that they had both lost control of their buoyancy on the safety stop at 5m, the newly qualified diver because he had forgotten to tuck and roll and the diver who lost a fin due to being under-weighted. The maximum depth was 16m and total dive time was 26 min. Neither diver's computers had locked out. Asking if they were OK, the female diver explained the cramp and that it had not returned but now had changed to 'pins and needles'. She was monitored more closely, and an assessment at the time identified no deficit and she said the 'pins and needles' were reducing. After 45 min, she was asked if they had all gone but she replied that they were still present and so a call was made to a recompression chamber for advice. Due to the shallow depth of the dive, no fast ascent or missed stops, the decision had been made that it was not necessary to put the diver on oxygen and this was explained to the staff at the chamber, who did not insist she be given oxygen. The dive manager decided to cancel the plans for a second dive and start to return to harbour. A doctor from the chamber called back and asked to speak directly to the diver and requested they return to harbour and she checked her body for signs of any rash. The diver made her way to the changing room to check under her suit for any rash and she found a rash on her leg where the 'pins and needles' had been on her right calf. She also found she experienced pain when putting weight on her right leg. She was advised to attend the chamber and the doctor said he would arrange a helicopter evacuation if she wanted, but the diver refused and asked the dive manager to drive her. She was positioned in the back seat of a pickup and an oxygen set was close to her in case her condition deteriorated. The diver received a 5 hour 45 min treatment in the recompression chamber, resulting in full resolution of symptoms.

May 2024 **24/038**

A diver took part in a first dive of the day where he acted as a simulated casualty for a student dive leader. The group descended to a depth of 15m, where the instructor did a controlled buoyant lift as a demonstration from 15m to 6m. The group then descended back down to 15m, and the student lifted the diver from 15m to 8m, but then let too much gas out of the diver's BCD and the pair sank back down to 15m. The student conducted a second lift from 15m to 6m, which was successful. The plan had been to then do an exploratory dive to 25m, but the student signalled he was too cold and wanted to end the dive. The instructor deployed a DSMB and the group ascended to conduct a safety stop at 5m for 6 min, which was extended due to the simulated casualty staying just below 5m. The group surfaced with a maximum depth of 15m for a total of 30 min, including a safety stop at 5m for 6 min. After a surface interval, the student was still warming after the first dive and chose to miss this dive. The dive was planned as a fun dive to greater than 25m as an experience dive for the previous simulated casualty. The pair descended to just beyond 25m as the visibility was a 'horrendous' 30cm at most. When the student's computer got to 8 min no stop time remaining, the pair started a gradual ascent up the slope to 15m and then to 5m to complete a safety stop. The student deployed a DSMB as practice and the pair surfaced with a total dive time of 31 min to a maximum depth of 26m. The student then towed the instructor to the exit point for a distance of 50m. After a further surface interval, the pair were joined again by the student from the first dive. The aim was to achieve another 26m dive. The group descended and explored some wrecks on their way to a depth of 26m. At depth, the second student experienced some narcosis and so brought them all up by 5m and felt fine afterwards. The group ascended to 5m to complete a safety stop and the second student again deployed a DSMB. The group surfaced with a maximum depth of 26m and a total dive time of 28 min, including a safety stop at 5m for 3 min. The group took their time packing away the kit and the second student noticed his left palm ached but thought this was due to lifting cylinders, including a heavy 15 lt. Approximately 50 min after surfacing from the last dive, the group left the site and started the drive home. The second student mentioned to the instructor that his hands felt numb/cold, which was odd, explaining it felt like being outside a long time and then touching a hot mug. He believed this was due to having dived in a thinner jumper as an undersuit and the water had been cold all day at 8-9C. 30 min later, the diver noticed that the strange sensation was still present but had deteriorated with 'pins and needles' in his fingers, a strong pain in his right hand and his feet having pins and needles. The instructor who was driving said it wasn't normal and they would keep an eye on it until they stopped for food in approximately 30 min. On arrival at the planned food stop, the diver called a diver helpline who advised to wait until they could talk to a doctor, but the instructor decided not to wait and started driving towards the chamber, 1 hour away. Approximately 20 min later, the chamber called back to tell them to come as the doctor wanted to see the diver. On the way, the diver's joint pains significantly worsened and he detected what appeared to be a rash on the soles of both his feet. On arrival at the chamber the diver was assessed immediately and given recompression treatment for 5 h 30 min. On exiting the chamber, the diver's symptoms had eased significantly and he was discharged with advice not to dive for a month and would require a medical before diving again.

June 2024 **24/041**

Two divers dived a wreck with a planned maximum dive time of 55 min, with a maximum requirement of 3 min deco. Both divers used twin-sets with nitrox 32 and descended to the wreck at a maximum depth of 28m and found the visibility was poor at 2-3m. Approximately 35 min into the dive at depth of 27m, the pair agreed to start their ascent. One of the divers deployed his DSMB but was pulled upwards by the reel, losing sight of his buddy, and although he controlled this within 1-2m and descended back to the wreck, he was unable to relocate his buddy. After a brief unsuccessful search, the diver ascended to complete all his required stops, which cleared during ascent, and a safety stop. The diver surfaced with a total dive time of 46m and a maximum depth of 28m. His buddy also surfaced, having completed all required and safety stops. During the journey back to harbour, the diver experienced a slight headache. On arrival back at harbour, the diver's headache had gone and he rushed back to his car in order to get cash to pay the skipper. The group then considered the conditions under the pier and several, including the diver, decided not to do a second dive and go to de-kit. After about 45 min, the group discussed going to get some lunch but the diver declined as he was planning to return home. He then started to feel dizzy which got worse over the next 30 min and he started to feel nauseous and was not able to hear though his right ear. After another 15 min, the diver was unable to walk in a straight line and had to ask for help returning the regulators he had hired. He was feeling less nauseous and his hearing had returned but he was still dizzy. A call was made to a diving doctor for advice using a number for a chamber close to home. They were advised to call a chamber nearer their location and the group had to search online for the number. Once through to the local chamber, they were advised to bring the diver in for assessment. On arrival, the diver was assessed and was recompressed for 7 hours 30 min and then released to book into a local hotel. The diver received repeat 90 min treatments for the next 6 days. The diver was advised that the DCI may have been due to a PFO and he was advised to have it checked. The diver had been in touch with a cardiologist who agreed and he subsequently had tests which confirmed a PFO and had a closure operation and is now back diving again.

June 2024 **24/286**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

June 2024 **24/285**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

June 2024 **24/045**

A diver had problems underwater whilst diving a wreck and he made a rapid ascent to the surface. The diver was retrieved from the water aboard a charter vessel and was already showing signs of DCI. The diver was placed on oxygen, whilst the skipper alerted the emergency services. The Coastguard tasked a rescue helicopter, which airlifted the diver to hospital from which he was transferred to a recompression facility. The diver received a six hour recompression treatment and was discharged late the same evening. (Coastguard report).

June 2024 **24/043**

A diver completed a wreck dive to a maximum depth of 62m, using a rebreather with trimix diluent, with a total dive time of 70 min, including stops at 34m for 2 min, 15m for 8 min, 9m for 8 min and 6m for 25 min. The surface conditions were hot sun and calm sea. The diver experienced a skin rash and itching across his chest and stomach, suspected due to dehydration. A recompression chamber was contacted for advice and he was advised to attend for assessment. At the chamber, all cognitive tests were passed, but the diver was advised to have recompression treatment as a precaution.

June 2024 **24/044**

A diver had completed 5 days of diving, with two dives per day. On the final day, he completed a first dive to 40m, using nitrox 28, with a total duration of 44 min, including required decompression stops at 5m for 11 min. After a surface interval of 158 min, he completed a second dive to a maximum depth of 28m using air for a total duration of 50 min, including required decompression stops at 5m for 8 min. Both dives were without incident. During the boat ride back to harbour, the diver reported a rash with itchy skin, fatigue, slight blurred vision and an ache in his left tricep. The diver was placed on oxygen and given water to sip between breaths. A recompression chamber was contacted for advice and the diver attended to receive recompression treatment.

July 2024 **24/290**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

July 2024 **24/299**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

July 2024 **24/297**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

July 2024 **24/303**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

July 2024 **24/291**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

July 2024 **24/052**

The Coastguard was alerted by a dive vessel of two divers having ascended quickly from a dive. The Coastguard tasked a lifeboat and a Coastguard rescue helicopter. When the RNLI crew arrived, they examined the divers and found one appeared to have symptoms of DCI and would require further medical assistance. The diver was taken aboard the lifeboat before being transferred to the helicopter and airlifted to hospital for assessment. The diver was then transferred by ambulance to a chamber where they received recompression treatment. (Coastguard and RNLI report).

July 2024 **24/061**

A diver had completed a first dive using nitrox 32 to a maximum depth of 29m for a total of 45 min, including a safety stop at 6m for 3 min. After a surface interval of 130 min, she carried out a second dive using nitrox 32 to a maximum depth of 30m for a total duration of 52 min, including a safety stop at 6m for 3 min. Both dives were relaxed with no problems. At one point on the second dive they experienced a current they turned around rather than swim against it. After the second dive, the diver noticed her left shoulder felt bruised when pressure was applied to it but no pain on moving it. Later in the evening, when getting ready for dinner, the diver noticed a rash under her arm and asked her roommate to check her back, which she confirmed also had a rash. A doctor at a recompression chamber was contacted and sent copies of photographs of the rashes, and the diver was advised to attend the chamber. On arrival at the chamber, symptoms had progressed to increasing tenderness in the shoulder, under arm and breast tissue and some tingling in the inner thighs. The diver was placed on oxygen whilst waiting for the doctor, during which the rash improved. On being assessed, the doctor diagnosed DCI involving skin, lymphatics, vestibular and poor sharp/blunt perception in lower limbs. The diver received two recompression treatments that night and the next day there was a resolution of all symptoms, except residual tenderness remaining from inflammation.

July 2024 **24/096**

A diver had completed a dive the previous day to a maximum depth of 30m with a total duration of 40 min, including a safety stop at 5m for 3 min. The next day, she conducted a dive to a maximum depth of 25m with a total duration of 40 min, including a safety stop at 5m for 3 min. Shortly after recovery aboard the boat allowing another pair to dive, the diver reported a pain in her shoulder, described as a burning sensation, similar to one experienced six years previously that was successfully treated by recompression after a delay of around 24 hrs. Shortly after, the other two divers surfaced and were recovered aboard and were asked to put the diver on oxygen. The diver was laid down and placed on oxygen by demand, and the Coastguard was contacted to report a DCI requesting a link call with a recompression chamber. The boat then started making their way to their base harbour but the Coastguard called back and advised diversion to another harbour where they would be met by an ambulance to transfer the diver to a recompression chamber. The Coastguard then called and patched through a doctor from the chamber team who took details of the incident. The boat proceeded to the meeting point with the ambulance. On arrival, the ambulance team took over the casualty and transferred them to the ambulance in a prone position and put them on the ambulance supply of oxygen. The ambulance transported the diver to the chamber on blue lights. The diver received a six hour recompression treatment and discharged. The next day, the diver reported being tired but no other adverse effects but did not dive for the rest of the trip or for some time after they had returned home.

August 2024 **24/311**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

September 2024 **24/084**

A diver had completed a dive with his buddy from a boat to a maximum depth of 37m without incident. After returning to shore, the diver started to experience symptoms of DCI. The Coastguard was contacted and they tasked a helicopter to airlift the diver to a recompression facility where the diver received recompression treatment.

September 2024 **24/085**

A diver had conducted a dive on a wreck the previous day with two other divers to a maximum depth of 20m. (Linked to Incident No. 24/278) During preparation for the ascent, one of the other divers tried to deploy his DSMB with a new reel but the line tangled and so he asked the third diver to deploy his DSMB. The second diver's line had tangled with his torch and presented a risk of entanglement to the other two divers, and so he ascended to a distance about 6m away from them, but still in view. As the second diver reached 6m, he continued his slow ascent direct to the surface, omitting a safety stop. The diver and the third diver ascended on the DSMB and stopped at 6m, but after a few seconds, the diver made an uncontrolled ascent to the surface. The third diver could see the diver on the surface and completed his safety stop. The boat recovered all divers and no issues arose from the dive, with the diver having a total dive time of 33 min. The next day, after a surface interval of 23 hrs, the same group of divers conducted a dive on another wreck and the diver added extra weight. The second diver led an exploration of the wreck until reaching the bow, and as he stopped to signal the others, the diver started to drift up, noted by the third diver who tried to help him into a feet down position to regain control. As the pair started to

drift up slowly, the second diver also went to assist. But at 11m, the pair were being dragged up and had to let go and they sank back down, whilst the diver ascended direct to the surface, and was recovered into the boat and was placed on oxygen as a precaution. After the trip it was found that the diver had gone to a chamber and received recompression treatment.

September 2024 **24/322**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

September 2024 **24/319**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

September 2024 **24/236**

A diver had completed a first dive to 31m for 60 min. Some time later, they conducted a second dive using nitrox 33 to a maximum depth of 25m for a total duration of 51 min. The diver suffered from visual disturbances and a skin rash, and was placed on oxygen and transferred to a recompression chamber for treatment.

September 2024 **24/089**

A diver had descended to a maximum depth of 13m. After around 14 min he was at 10m when he lost control of his buoyancy and ascended direct to the surface in a faster than normal ascent. The diver was treated for DCI.

October 2024 **24/323**

Coastguard received a report of a diver suffering from DCI. (Coastguard report).

October 2024 **24/238**

After a first dive to a maximum depth of 22m for 40 min and a second dive after a surface interval to 32m for 38 min, both dives multilevel breathing air, a diver experienced nausea, vomiting and head spinning whilst trying to eat lunch. The diver was evacuated to a recompression chamber by helicopter for treatment and investigation for a PFO.

October 2024 **24/103**

A diver completed two dives on the first day of a diving trip. The first dive to a maximum depth of 34m with a total duration of 57 min, including stops at 6m for 10 min, and then after a surface interval of 5 hours, a second dive to a maximum depth of 37m with a total duration of 41 min, including stops at 6m for 5 min. During the night, the diver woke up complaining of a sore elbow which sounded very much like a DCI. Contact was made with a diving doctor and the diver underwent recompression treatment. Treatment resolved the symptoms and the diver was advised not to dive for a month and increase conservatism on his computer.

October 2024 **24/252**

Coastguard tasked a lifeboat to respond to a diver suffering from DCI. (Coastguard and RNLI report).

December 2024 **24/112**

A group of divers had conducted two dives the previous day, the second to a maximum depth of 19m for a total duration of 38 min. After a surface interval of 21 hours and 11 min, the group conducted a dive to a maximum depth of 15m for a total duration of 36 min. After a further surface interval of 128 min, the group entered the water for a training dive for one student to a planned maximum depth of 20m. Around 10 min into the dive, the group got swept up by a current following along a wall at around 15m. The group were quickly dragged deeper down to 20m, at which point they attempted to swim against it, however found themselves being spun around and down to 25m. The group was still together, however the instructor indicated to two more experienced divers to ascend together whilst he ascended with the student. Each buddy pair ascended together, with the instructor and his student surfacing first, and the other pair surfacing 2 min later due to having attempted a safety stop, with a total dive time of 20 min. During ascent, both buddy pairs were being swirled around, and from the surface an eddy was visible. After a 25 min surface swim, all members got out and were advised to keep an eye out for symptoms. One diver began to feel nauseous, but that soon passed and he went to sleep early after dinner. The diver felt fine the following morning and dived to 5m for 9 min with no issues. After the drive home that evening across the high ground, the diver reported the following morning that he felt a constant pressure on his forehead. The next morning, he mentioned the same pressure and also shoulder pains after travelling further to home. The diver rang a diver help line and went into the recompression chamber at around 15:00 for treatment. All the other divers experienced no symptoms or any other ill effects.

Boating and surface incidents

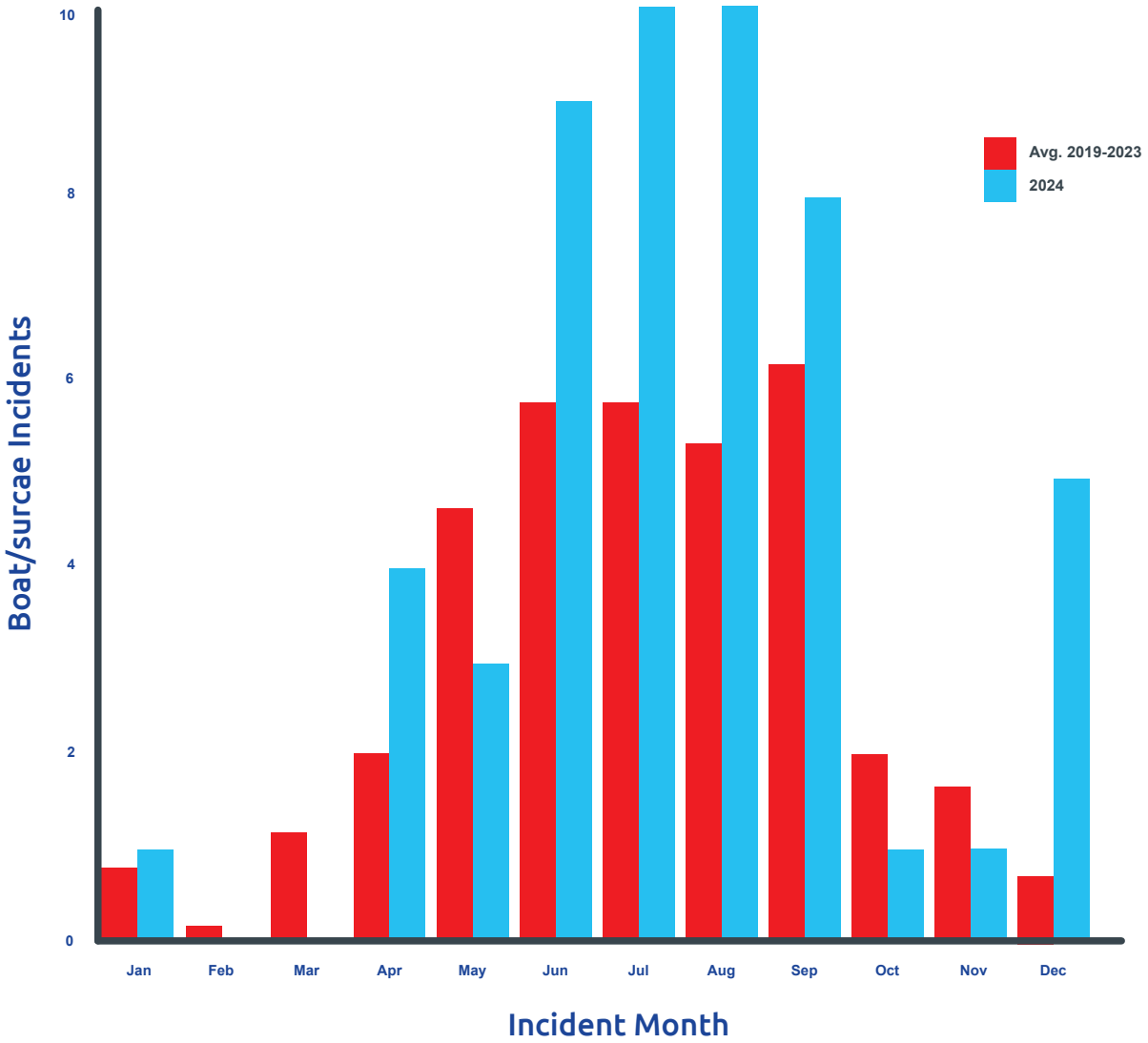


Figure 15
The month of occurrence of Boat or Surface incidents

January 2024 **24/273**

Coastguard responded to reports of a diver in the water. (Coastguard report).

April 2024 **24/274**

Coastguard responded to reports of a diver in the water. (Coastguard report).

April 2024 **24/277**

A group of divers were preparing to launch a RHIB at a coastal site, and the trailer was attached to a launching tractor at the site. As the tractor prepared to reverse into the water, three divers in drysuits walked either side of the RHIB whilst a fourth held the painter. The RHIB started to float off the trailer when the waves pushed the boat back onto the trailer. The tractor reversed again, and this time the RHIB floated off with the divers holding on to the side in waist-deep water as the tractor edged back up the beach. A further stronger wave then hit the group, throwing the RHIB in the air and knocking the divers over, with some rolling up the beach. The RHIB landed on the edge of the trailer and the group then realised that one of the divers was wedged under the RHIB submerged under water. The group members rushed to free the trapped diver, and although some were knocked over by a further wave, the diver was released with no lasting effects. The RHIB was subsequently found to have sustained damage, which made it unusable for the remainder of the trip.

April 2024 **24/033**

A cox'n had dropped a pair of divers onto a shotline and handed over control of the RHIB to his buddy to drive whilst he prepared his kit. After about 5 min, the engine cut out, and despite changing over the fuel tanks, it still would not start. The cox'n called over their second boat to assist, and as they approached, they noted the RHIB had run over a pot line. The engine was raised and was found to have the rope wrapped around the lower part of the outboard and the buoy trapped above the propeller. Due to the wave motion and breeze, the boat turned and water began to come over the transom. The bilge was turned on and the buddy tried to untangle the rope but the tension was too great. The second boat then tried to tow the RHIB against the waves and wind to ease the tension but this failed. As the buddy continued trying to unwrap the rope, he slipped and clung onto the engine but ended up having to slip into the water. He held onto the transom for a few min whilst he caught his breath, then made his way to the side of the boat where he was assisted aboard by the cox'n and another diver from the other boat. With no other alternative, they cut the rope and the engine started and they were able to recover their divers when they surfaced 10 min later. The buddy was too exhausted by his efforts to clear the prop and so decided not to dive and the boat returned to harbour.

April 2024 **24/014**

A dive vessel suffered engine failure whilst there was still a diver underwater. The cox'n called the Coastguard and a lifeboat was tasked. Once on scene, the lifeboat recovered the diver and towed the stricken vessel back to harbour. (Coastguard and RNLI report).

May 2024 **24/281**

Coastguard received a report of a diver overdue and missing. (Coastguard report).

May 2024 **24/282**

Coastguard received a request to respond to a diver in the water. (Coastguard report).

May 2024 **24/280**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

June 2024 **24/289**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

June 2024 **24/288**

The Coastguard responded to reports of a diving vessel drifting or dragging anchor. (Coastguard report).

June 2024 **24/284**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

June 2024 **24/047**

A dive vessel alerted the Coastguard that one of their divers was missing following a dive on an offshore reef. The Coastguard tasked 3 lifeboats and a rescue helicopter to assist in the search for the missing diver. Once on site, the lifeboats initiated a search pattern and the diver was located on the first leg and recovered from the water. The helicopter paramedic was winched down to the lifeboat and carried out an assessment of the diver, who was found to be in good health and did not require medical attention. The diver was returned to his dive vessel and all assets stood down and returned to base. (RNLI report).

June 2024 **24/243**

A lifeboat to respond to reports of a diver in the water. (RNLI report).

June 2024 **24/062**

A diver had completed a first dive to a maximum depth of 16m for a total duration of 27 min on slack water at a site known for strong currents. Divers from another group advised that the divers had time for a second dive before the current picked up and so, after a surface interval of 89 min, the diver conducted a second dive to a maximum depth of 17m. A few min after descending, the diver deployed his DSMB. Partway through the dive, the current started to pick up and the diver held onto his DSMB reel with one hand and gripped his less experienced buddy with the other. Shortly after, the diver got to the limit of the line on his reel and realised he could not rewind the reel against the current, so he released the reel and the pair began their ascent. Meanwhile, the shore cover had noted the DSMB drifting away from the site at speed and the dive manager was concerned that it indicated that divers were caught in the current. The dive manager delegated monitoring to an assistant and took a throw line and walkie talkie whilst he jogged down to the slipway. He was surprised not to see the divers surface and was about to call the Coastguard when the assistant dive manager reported via the walkie talkie that all divers had surfaced and were leaving the water. The group reported the missing DSMB and reel to the Coastguard.

June 2024 **24/241**

Coastguard responded to reports of a dive vessel with mechanical problems. (Coastguard report).

June 2024 **24/244**

A lifeboat to respond to reports of a diver in the water. (RNLI report).

June 2024 **24/245**

A lifeboat responded to a dive vessel that had suffered engine failure. (RNLI report).

July 2024 **24/293**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

July 2024 **24/292**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

July 2024 **24/296**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

July 2024 **24/300**

Coastguard received a request to respond to a diver in the water. (Coastguard report).

July 2024 **24/302**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

July 2024 **24/301**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

July 2024 **24/058**

A group of 17 divers entered the water from two club RHIBs and a charter RHIB, for a planned drift dive to a maximum 20m and a total dive time of 40 min. The plan, based on advice from the charter boat skipper due to deteriorating weather, was for each buddy group to carry out a free descent and to drift for 20 min before deploying DSMBs. The dive progressed as planned, but DSMBs were deployed after 15 min. However, on entry buddy pairs drifted in different directions, with some drifting north, one buddy pair experiencing negligible drift and others drifted south as expected. On surfacing, one buddy pair could see the boats recovering divers inshore of their position, but were unable to attract attention due to the high sea state at their location to seaward. After all other divers had been recovered, the boats started searching for the missing dive pair. After 40 min on the surface, the divers had drifted into a main channel and managed to attract the attention of a sail boat, who alerted the Coastguard to the divers' location and dropped their sail to maintain contact with the divers in the water. The Coastguard was unable to raise any of the RHIBs by radio and made contact with the charter boat by phone to relay the divers' position. The RHIB located the divers after 15 min and recovered them safely aboard after a total of 70 min on the surface. The divers had completed a dive to a maximum depth of 16m for a total duration of 35 min, including a safety stop at 6m for 3 min. The charter RHIB returned behind a breakwater to meet the other two RHIBs and were met by a lifeboat tasked by the Coastguard, which escorted the boats back to harbour. One of the recovered divers had swallowed seawater which caused him to be sick and the lifeboat requested that the recovered divers be transferred for further assessment. After transfer to the lifeboat. both divers were assessed. They were transferred to an ambulance once back at harbour and taken to hospital for treatment for salt water aspiration. Both divers were discharged from hospital two hours later with no issues found. The radios on both club RHIBs were found to be working prior to launch and after return, but no reason was found for them not working during the search for the missing divers.

July 2024 **24/060**

A diver had conducted a first dive to a maximum depth of 12m for a total duration of 57 min. After a surface interval of 81 min, he conducted a second dive to a maximum depth of 13m. Towards the end of the dive deployed his DSMB and ascended to conduct a safety stop, at a depth of 6m. During the safety stop a dive vessel went over his buoy and it caught in the boat's propeller and started to drag the diver towards the surface. The diver let go of his reel and surfaced to see the boat approximately 20m from his position. The DSMB buoy had been shredded by the boat's propeller.

July 2024

A dive boat suffered engine failure, which was subsequently identified to be due to the gear linkage. The fault was repaired by the maintenance team.

July 2024

A lifeboat to respond to reports of a diver in the water. (RNLI report).

August 2024

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

August 2024

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

August 2024

Coastguard received a report of a missing person. (Coastguard report).

August 2024

Coastguard received a report of a diver overdue and missing. (Coastguard report).

August 2024

The Coastguard responded to reports of a diving vessel involved in a collision. (Coastguard report).

August 2024 **24/308**

Coastguard received a report of a diver overdue and missing. (Coastguard report).

August 2024 **24/076**

Three divers with a dedicated cox'n planned to dive an inshore wreck a short distance from harbour and launched their RHIB as normal. The RHIB had twin outboard engines which had been recently serviced and this was the third trip to sea since then. They initially experienced a little difficulty starting the starboard engine, but once it started they decided to continue with the trip due to the short distance to the wreck. On arrival on site, the wreck was already buoyed and the three divers entered the water. After the divers had been in the water for about 30 min, the boat engines stalled and the cox'n was unable to restart either engine. The boat was drifting towards a pier, and so the cox'n deployed the anchor and called the Coastguard for assistance and the Coastguard tasked two lifeboats. Once on site, an inshore lifeboat started searching for the divers who were due to surface within 30 min of the alarm being raised. The divers surfaced under a DSMB within 20m of the shotline after a dive to a maximum depth of 12m for a total duration of 55 min. They could not see their RHIB but could see the inshore lifeboat 'zooming about' further out to sea. The divers deployed a second DSMB and held both up, waving them around to try and attract attention. The divers were close to shore and considered swimming ashore but after a couple of min, the lifeboat was coming closer and so they used their storm whistles to attract attention. The lifeboat came up to them and checked they were OK, and informed them of the RHIB's engine breakdown. The divers and their equipment were recovered aboard the lifeboat, and they then transferred to the offshore lifeboat that had arrived on scene and returned the divers to shore. The inshore lifeboat then went to the RHIB and towed the stricken boat back to harbour. The RHIB was recovered from the water, and once clear, the problem was investigated. It was found to be due to the fuel tank vent valves not being open properly, as the design was different from their other RHIB. The engines restarted and ran efficiently.

August 2024 **24/249**

A lifeboat was launched to respond to reports of a diver in the water. (RNLI report).

August 2024 **24/248**

Coastguard tasked a lifeboat to respond to a diver in the water. (Coastguard and RNLI report).

August 2024 **24/083**

A dive RHIB was covering 4 divers who were on a wreck. The boat moved closer to a charter boat to advise them of how many divers they had in the water and the charter boat was OK to recover their shot. Due to the wind and tide, the boat drifted too close to the charter boat and the stern and dive ladder made contact with the bow of the charter vessel. At the time, the crew were not able to determine if any damage had been caused.

September 2024 **24/318**

The Coastguard responded to reports of a diving vessel being kept under surveillance. (Coastguard report).

September 2024 **24/314**

Coastguard received a request to respond to a diver in the water. (Coastguard report).

September 2024 **24/317**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

September 2024 **24/315**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

September 2024 **24/321**

The Coastguard responded to a telephone report of a distress flare sighting. (Coastguard report).

September 2024 **24/250**

Coastguard tasked a lifeboat to respond to a diver in the water. (Coastguard and RNLI report).

September 2024

A group of three divers entered the water for an evening dive in a harbour. The group was reminded by the dive manager of the need to deploy a DSMB throughout the dive. They were then briefed to go out 50m from the western end of a pier, looking for nets and other rubbish and to record and report back on them. One of the divers was using a rebreather, whilst the other two were using open circuit 15 ltr cylinders. The rebreather diver and one of the open circuit divers each deployed a DSMB during the dive. The divers experienced difficulty in staying together, and the rebreather diver became separated from the other two. He surfaced and swam back to shore to be assisted from the water by the shore crew. The other divers continued and were heading further west outside the planned dive area. The dive manager (DM) noted a ferry was heading for harbour and called the harbour authority to alert them to the divers potentially heading further outside the controlled area. 10 min later, the divers had drifted further west, and so the DM called the harbour authority again, who had also noted the situation and had notified a police launch. The divers surfaced after a total dive time of 50 min, inside their planned maximum time of 60 min, with a maximum depth

of 14m. The divers began making their way back to shore on the surface, and once within speaking range, they informed members of the shore party they were OK. The pair made their way around rocks being monitored by other divers from the group, and exited the water 25 min after surfacing. Both divers reported they were OK but a little shaken and confirmed the difficulty of staying together with the rebreather diver and hadn't realised how far they had travelled. One of the pair thought they had experienced a current underwater, and they had tried to crawl along the seabed without much success. The police launched and arrived just as the divers were exiting the water, and the DM reported to the harbour authority that all were safe and well.

September 2024 **24/251**

A lifeboat responded to reports of a diver in the water. (RNLI report).

October 2024 **24/324**

The Coastguard responded to reports of a diving vessel with machinery failure. (Coastguard report).

November 2024 **24/327**

Coastguard received a report of a diver overdue and missing. (Coastguard report).

December 2024 **24/333**

Coastguard received a report of a diver overdue and missing. (Coastguard report).

December 2024 **24/331**

Coastguard received a report of a diver overdue and missing. (Coastguard report).

December 2024 **24/334**

Coastguard received a report of a diver overdue and missing. (Coastguard report).

December 2024 **24/113**

The Coastguard relayed a 'Mayday' call reporting a missing diver. A research vessel hearing the relay call realised they were close to the reported location and offered to join the search. The research vessel located the diver 10 min later after spotting their DSMB. The vessel checked the diver was OK and reported the location to the Coastguard and stood by until a lifeboat arrived and a crew member went aboard the vessel to assist with the recovery of the diver and their equipment. After checking the diver out, they were returned to their dive vessel.

December 2024 **24/114**

Three divers were rescued by a rescue helicopter from offshore rocks in 60 mph winds. (Coastguard report).

Ascents

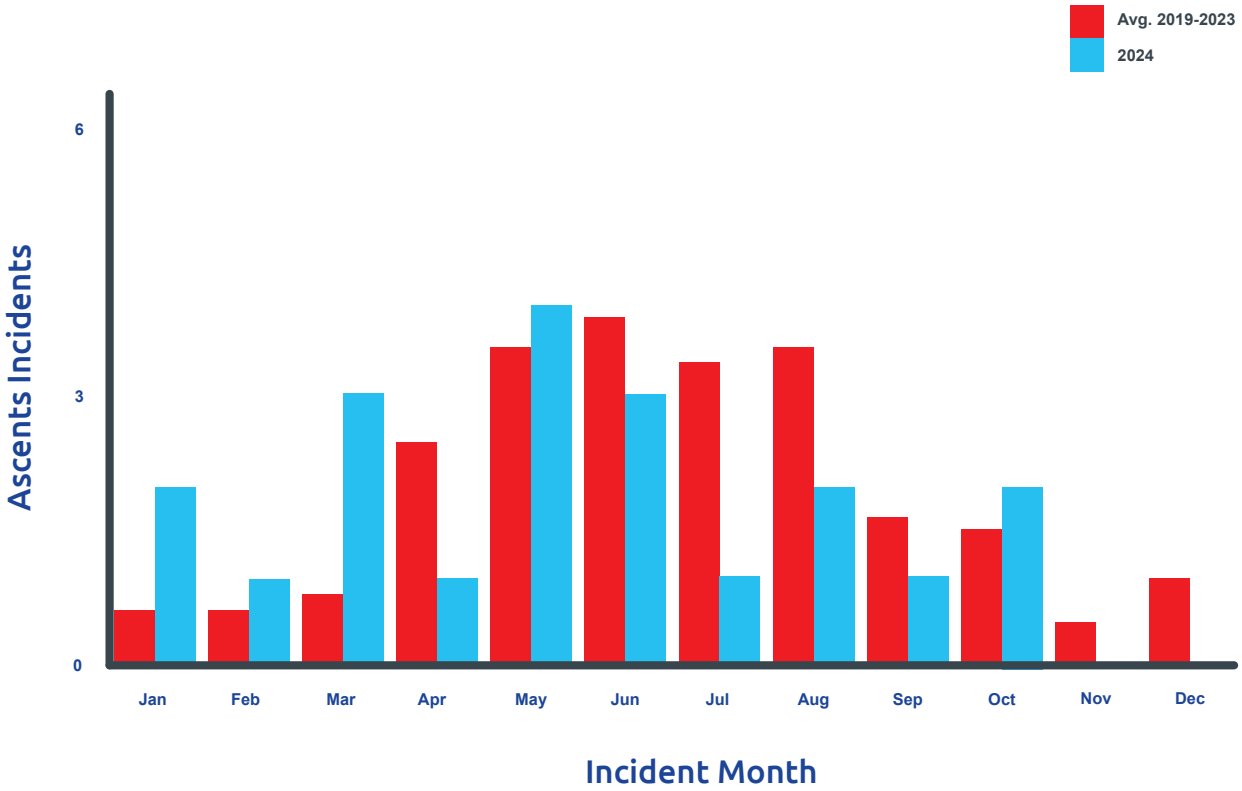


Figure 16
The month of occurrence of Ascent related incidents

January 2024 **24/118**

Following a dive to a maximum depth of 20m a diver was unable to control of his buoyancy at 6m and ascended direct to the surface becoming separated from his buddy and omitting safety stops. It was believed that the diver had been under-weighted.

January 2024 **24/329**

A diver had completed a first dive wit his buddy to a maximum depth of 14m and a total dive time of 36 mins. After a surface interval of 182 min the pair conducted a dive to a wreck at a maximum depth of 26m. The diver went to deploy his DSMB towards the end of the dive from a depth of 22m. As he inflated the buoy he was unable to release the trigger on the reel and he was pulled up from 22m to 15m before he let go of the reel and was able to control his buoyancy and descend back to his buddy. The incident caused the diver to breathe heavily and consume his gas faster. The diver completed a safety stop and surfaced with 50 bar remaining in his cylinder after a total dive time of 26 min, and suffered no ill effects.

February 2024 **24/004**

Over the course of a weekend, an instructor and two students had conducted training for a second level diver training course. On the second day, training was completed over two dives, the first to a maximum depth of 19m for a total duration of 40 min and, after a surface interval of 95 min, a second dive to a maximum depth of 13m with a total dive time of 35 min. After a further surface interval of 84 min the group entered the water for a planned experience dive to a maximum depth of 20m to focus on good trim and finning technique. After visiting a number of underwater features, the group were approaching an underwater wall. The instructor indicated the approaching wall and received an OK from both divers. As they reached the wall, the instructor turned to indicate they were to start to ascend the wall to a depth of 9m but could only see one of the students. Looking up, all the instructor could see was their bubbles and when querying the remaining student he indicated he did not know where the other diver had gone. Horizontal visibility was such that the missing diver was most likely above them and so the pair ascended up the wall, looking around all the time. They then navigated a short distance to a shotline near the top of the wall and continued their ascent, continuing to look around. The pair ascended direct to the surface, omitting safety stops because they did not know the condition of the missing diver, or if she might need assistance. On surfacing, they saw the missing diver next to the site rescue boat. The diver's feet had come out of her drysuit boots and fins and she was assisted out of the water by the boat crew and taken back to shore to be evaluated by the site team. The diver reported that she had lost control of her buoyancy when air migrated to her feet, and she was not able to counteract the inversion and made an uncontrolled ascent to the surface. She reported that she was feeling fine and no signs or symptoms of DCI or feeling unwell were reported, and she continued to be monitored for any potential symptoms.

March 2024 **24/220**

A shout was heard alerting an on-site rescue team to two rebreather divers on the surface after a rapid ascent from 36m, with a total dive time of 30 min. A rescue boat attended and both divers were alert and talking and recovered from the water and placed on oxygen.

March 2024 **24/012**

A student on a training course was carrying out drills on a platform at a depth of 5m. When he removed his regulator it started to free flow and instead of attempting to stop it or seek an AS from his instructor, he bolted to the surface from a depth of approximately 3m. At the surface, the student did not inflate his BCD and was underwater just below the surface without a regulator in his mouth. The instructor attempted to replace the student's regulator, offered his AS and tried to inflate the student's BCD but all attempts failed due to the student's panicked state. The instructor managed to push the student up so that his head cleared the surface, allowing him to breathe, and he then inflated the student's BCD and towed him to the shore. The student was shaken by the experience but showed no subsequent symptoms and was able to carry out another training dive later the same day without incident.

March 2024 **24/221**

A diver experienced a regulator free flow at a depth of 18m, resulting in both divers having a rapid ascent direct to the surface, omitting any safety stops. Both divers were responded to by an on-site rescue boat and both were fine with no indications of any symptoms and they were offered oxygen as a precaution. The divers were advised not to dive again that day.

April 2024 **24/275**

A diver joined a liveaboard trip. On the first day of diving, he was paired with a buddy he was not familiar with for a shakedown dive for the group on a wreck at a maximum depth of 24m. After about 40 min of the dive, the diver lost control of his buoyancy and grabbed the rail, with his feet up, and signalled he wanted to ascend. His buddy signalled that they were close to the shotline about 3m away, but the diver signalled again that he wanted to ascend immediately. His buddy deployed a DSMB and offered the reel to the diver to go up on. The diver did not take the reel but grabbed the line and made a fast ascent from 12m direct to the surface, omitting safety stops. He surfaced with a total dive time of 45 min. He remained on the surface holding the DSMB before being signalled to get aboard the dive vessel using the diver lift. The diver had been using air but suffered no ill effects. His buddy had initially been pulled up from 12m to 7m, and his dive computer was beeping and indicated that a penalty of 2 min of decompression stops had been applied. Realising his buddy was pulling on the buoy on the surface, he unlocked the reel and descended to 12m and waited for the buoy to be free again before ascending. He completed 5 min of stops at 6m and surfaced with a total dive time of 52 min, and had been using nitrox 32. (linked to report 24/028).

May 2024 **24/209**

An Instructor, and two students conducted two dives to carry out controlled buoyant lift training. The first dive went without incident to a maximum depth of 9m for a total duration of 16 min, but the student ascents did not meet the required standard. After a debrief and surface interval of 120 min, the group entered the water and controlled buoyant lift training was completed successfully before the group then went for an exploratory dive. Whilst swimming along the base of a wall, the instructor noticed one of the students panicking whilst swimming along. The instructor took control of the

student and started an ascent direct to the surface. On surfacing, after a dive to a maximum depth of 16m for a total duration of 29 min, the instructor tried to get the student to say what was wrong but she was panicking and incoherent. The instructor shouted for help and then looked down to see the second student ascending in a controlled manner, but omitting their safety stop. The site safety boat recovered the panicking student and returned her to shore, whilst the instructor and second student swam back to shore on the surface. After checking the second student was OK, the instructor went to the on-site first aid room where the other student was fine, if a little embarrassed. She described having vertigo, causing her to panic. It was subsequently discovered that the student had aborted a previous training dive due to an ear issue causing nausea and distress but this had not been disclosed to the instructor until after this incident. (Linked to incident 24/110)

May 2024 **24/032**

A diver and her buddy carried out a dive to a wreck at a maximum depth of 28m. The diver found herself slightly under-weighted at her 6m decompression stop and missed one minute of stops. The diver was monitored for symptoms of DCI but none presented and she did not dive again that day.

May 2024 **24/039**

A diver conducted a wreck dive to a maximum depth of 44m using a rebreather with trimix 17/36 as diluent. The diver and his buddy prepared to ascend, and both deployed their own DSMBs from a depth of 42m. The diver deployed his first. In low visibility his buddy deployed his DSMB, but it tangled with the diver's DSMB and pulled him up to 35m before he could release the ratchet on his reel and adjust his buoyancy. As the diver's arm was raised by the reel, gas escaped through the cuff seal into the diver's dry glove and became trapped as the seal reseated. As the diver continued his slow ascent to 15m, the trapped gas in the glove expanded, preventing the operation of buoyancy controls and reel, resulting in the diver ascending to near the surface in a fast ascent. The diver dumped gas and sank back down to 22m, remained negatively buoyant and used the reel to slowly wind himself back up. When the glove started to expand again, the diver believed it was due to his drysuit's direct feed sticking and so he disconnected it with the unaffected glove. The diver completed 4 min of required stops at 6m indicated by his computer, plus an additional 13 min safety stops. The buddy was not affected but remained with the diver during his additional stops. The entangled DSMB lines helped ensure the divers were able to reestablish contact after the initial ascents. The pair surfaced after diving to a maximum depth of 44m, with a total dive time of 53 min. On exiting the water, the diver continued to breathe from his rebreather with high PO2 for 10 min as a precaution. On investigation, it was found that the cord placed inside the seal to allow gas migration in and out of the glove had fallen partially inside the seal. The diver contacted the manufacturer and they confirmed that their recommendation was that something be inserted into the cuff seal to allow air migration in and out of the glove.

May 2024 **24/048**

A qualified diver was diving accompanied by two instructors for what was his first dive in fresh water. On his first dive of the day, he was found to be very over-weighted but completed a dive to a maximum depth of 17m for a total dive time of 52 min, including a safety stop at 6m for 3 min. After a surface interval of 96 min, where 6 kg was removed from the diver's weightbelt, the group conducted a second dive, with one of the instructors taking a spare 4 kg of weight in case it was required following a weight check. The group entered the water and the student was able to descend and so the group continued the dive, although the instructor was now very over-weighted himself but was able to control his buoyancy. During the dive, the instructor made regular checks on the diver's gas contents and noted he was using gas quickly. During one check, the diver gave a confusing signal. The instructor checked the gauge and noted 120 bar remaining and so started the short return journey before checking again and reading 50 bar remaining. The instructor decided to deploy his DSMB from 11m to ascend. The second instructor took the buoy and inflated it before the instructor was ready with the reel and the cord became tangled. He was pulled upwards to 5m before he was able to release it and descended back down to the diver. The diver was relatively inexperienced and hadn't done a midwater ascent since his initial training. As they ascended, the diver started to gain speed, and so the instructor grabbed him, but due to the extra weight he was carrying, the pair sank back down again to 11m. They tried again with the same result. On the third attempt, the instructor was conscious the diver was getting low on gas and so made the decision to surface and they made a buoyant fast ascent to the surface. On surfacing, the instructor and diver made themselves buoyant by inflating their BCDs and waited while the other instructor completed his safety stop and surfaced. The group then swam back to shore and exited the water after a dive to a maximum depth of 15m for a total dive time of 32 min. The diver had 30 bar of gas remaining in a 15 ltr cylinder, the instructor 120 bar and the second instructor 160 bar. The group monitored each other for signs of DCI but none were experienced.

June 2024 **24/182**

Two divers were conducting a dive down a rocky slope to a maximum depth of 18m in a slight current. As they reached a depth of 12m during the latter part of the dive, one of the pair looked behind her and lost her orientation on the slope. Combined with the current, she made a buoyant ascent direct to the surface,

omitting a safety stop. The surface cover saw her surfacing, checked she was OK and were told she had missed her safety stop, before they recovered her aboard an inflatable then returned her to the boat. She was given oxygen as a precaution for 10 min and monitored for signs of DCI. The diver displayed no signs or symptoms of DCI but they withdrew from the planned second dive. Her buddy conducted a normal ascent, including a safety stop at 6m for 3 min.

June 2024 **24/040**

Two divers had dived a wreck at 28m. One diver had accumulated 1 min of required stops at 3m, whilst her buddy had accumulated 3 min. The diver deployed her DSMB and the pair ascended slowly to their safety stop at 6m, where the diver struggled to get the last of the gas out of her suit and she continued to ascend direct to the surface, missing her required 1 min stop at 3m. Her buddy deployed a DSMB and completed her decompression stops and then surfaced to find the diver was already aboard the RHIB and the oxygen set was being prepared. The diver was placed on oxygen for 40 min and monitored but no symptoms appeared. Follow up contact over the next two days reported no symptoms occurring.

June 2024 **24/050**

A diver was conducting a planned decompression dive to a wreck using nitrox 25 and nitrox 50 for decompression, with his buddy having a similar configuration. The pair descended to a maximum depth of 36m, and after their planned 33 min bottom time, they commenced their ascent. At their first stop at 6m, both divers had 4 min of required stops. The diver was unable to hold his stop and continued direct to the surface, missing 4 min of decompression. His buddy stayed underwater and completed his stops, and ascended normally. The dive boat was quickly alongside the diver, and with the assistance of a member of the group who had not dived due to equipment problems, the diver was recovered aboard and placed on nitrox 80 and then assisted to de-kit. A casualty assessment was completed which showed no adverse signs or symptoms. After 20 min, the nitrox 80 was replaced with a restorative cup of tea. The diver decided not to dive again that day and was monitored for the rest of the day. They were able to return to diving the next day.

July 2024 **24/235**

A diver using air had completed a dive to 12m for 50 min. Some time later they conducted a dive to 25m and lost control of their buoyancy, resulting in a feet first ascent direct to the surface, with a total dive time of 18 min. On the surface, the diver's weight pockets would not release.

August 2024 **24/070**

A student was carrying out the final training dive with an instructor for her first qualification. The dive started at 6m with the completion of controlled buoyant lift training, before the student successfully led the planned dive route to a depth of 18m. The instructor then took over to navigate by compass to an underwater feature at a maximum depth of 21m, before handing back control to the student to lead the exploration of the wreck. As they approached the bow of the wreck, the instructor noted the student's contents gauge showing 70 bar. The pair had planned to follow the anchor chain back towards the shore before ascending to complete a safety stop. As they left the bows, the student started to ascend and the instructor followed her up. The student slowed and stopped before reaching the surface and the pair re-descended, intending to complete the dive. As they reached the anchor chain, the student checked her gas contents and signalled out of gas. The instructor quickly donated his primary regulator and then switched to breathe from his AS, having determined the student needed immediate assistance. The pair then conducted an AS ascent, with the instructor providing some additional buoyancy as the student was slightly heavy after the descent. The pair ascended direct to the surface, omitting a deep stop indicated by the student's computer and a safety stop. On surfacing, the student lay on her back and took the regulator from her mouth. She was stressed and breathing more rapidly than usual. The instructor ditched both of her weight pouches (around 12 kg) and this allowed her to float with her face clear of the water. The instructor then signalled for help and the site rescue boat was quicky alongside, and with help from the instructor and the crew, the student was de-kitted and she and her kit were recovered aboard and returned to shore. The instructor had asked the crew to check her contents gauge and they informed him it read 50 bar. Once ashore, the student was taken to the site first aid room and placed on oxygen, which she breathed for 10 min. The instructor made his way back to shore, and after de-kitting, went to the first aid room to witness the staff conducting an assessment of the student and found no problems. Her dive computer was inspected and found to show that no mandatory stops had been omitted and the pair had completed a dive to a maximum depth of 21m for a total duration of 3 min. The student described feeling anxious during the ascent and was hyperventilating. She was given advice on what signs and symptoms to look out for and if any occurred to contact a recompression chamber for advice. The pair remained on site for around an hour before returning home and neither diver suffered any ill effects. The student had an air integrated computer and reported reading the number 2 after the descent back down to the anchor. She had previously read the gas contents and believed she was out of gas and had started to panic, and signalled out of gas but she had not checked her analogue contents gauge, which would have shown she had at least 50 bar remaining.

August 2024 **24/278**

A diver and his two buddies went on a wreck dive to a maximum depth of 20m. On preparing to ascend, the diver had a problem with his DSMB that did not deploy fully, and so he signalled to one of his buddies to deploy his DSMB, which he did. The diver then moved away from the other pair to avoid them becoming entangled in his line but ascended alongside them. The diver followed the pair up to 6m, but during his ascent, the line had become entangled around his torch and he ascended direct to the surface, omitting a safety stop. The third diver had followed the buddy's DSMB line up, but at 6m lost control of his buoyancy and made an uncontrolled ascent direct to the surface, omitting safety stops. The buddy completed his safety stops and surfaced without incident. All divers were recovered aboard the dive boat and showed no ill effects. (linked to incident 24/085).

September 2024 **24/181**

A pair of divers conducted a planned dive to a maximum depth of 40m, with one of the divers using nitrox 28. The pair descended to a maximum depth of 41m and remained at that depth for 2 min, during which time one diver unknowingly lost a 2 kg weight from their pocket. The pair commenced their ascent and ascended to 20m, where they conducted a stop for 2 min, whilst the diver who had lost the weight began to deploy a DSMB. During deployment, the line went slack and got caught in the reel. The reel then jammed and pulled the diver up to 15m before he let go. The diver tried to dump gas and breathe out but was unable to regain his buoyancy and he continued direct to the surface in a faster than normal ascent. On the surface, the diver signalled the boat cover and was recovered aboard and was monitored but showed no symptoms of DCI. The diver was monitored for 24 hours and displayed no symptoms but he did not dive for the rest of the weekend. His buddy conducted a normal ascent.

October 2024 **24/213**

Two instructors and a student had conducted two training dives for a buoyancy workshop earlier in the day, without incident. At the end of the day, both instructors entered the water to recover a datum line from 19m. One diver was using a manifolded twin-set which was relatively new to him whilst his buddy was using sidemounts that he was very familiar with. The buddy kitted up in his sidemounts in the water and checked his kit function, whilst the twin-set diver kitted up on shore and was visually checked by the buddy when he entered the water. The diver was asked if he had checked his kit was functioning and was switched on and he confirmed it was, but it was not physically checked at that time. As the pair descended to 15m, the diver became heavy and noticed that his wing was not inflating. The buddy went to assist and noticed that the diver's left hand cylinder valve was closed. The buddy opened the valve but the diver's wing inflator stuck open and the diver started to become positively buoyant. The buddy immediately closed the valve and began to dump the excess gas from the wing. Despite holding the wing inflation dump fully open and as high as possible, the pair made a faster than normal ascent, exceeding their computer's maximum ascent rate and an alarm sounded. On the surface, both were OK and the diver's left hand cylinder was opened again and confirmed that all was functioning and there was no sign of the inflation valve jamming open. The pair decided to continue the dive to recover the shotline which they completed without further incident, spending 10 min on a safety stop at 6m as a precaution. Subsequent investigation determined that the diver had checked his equipment was fully on after kitting up and was assisted by the student from the earlier dives. However, on checking, the student thought one of the valves was off and she had turned both in the same direction whilst facing the diver, resulting in her turning one of the valves closed, whilst ensuring the other was open.

October 2024 **24/170**

A diver was ascending after a dive to a maximum depth of 20m when they lost control of their buoyancy at 6m and ascended direct to the surface, omitting a safety stop. The diver was found to be under-weighted due to not taking account of adjusting their equipment configuration and not adjusting their weight according.

Technique-related incidents

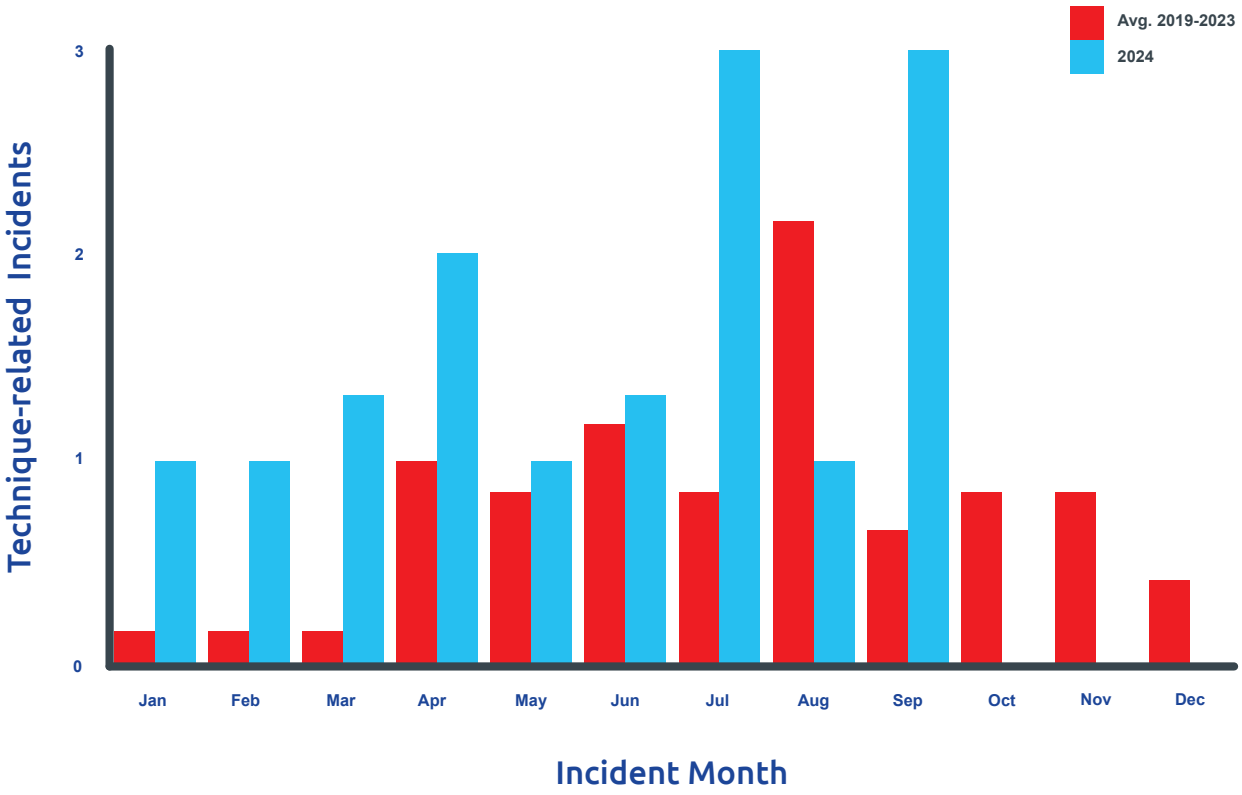


Figure 17
The month of occurrence of technique related incidents

24/003

A dive leader was leading a recently qualified diver on a dive to a maximum depth of 21m. The dive leader had briefed the diver on hand signals to communicate his gas contents throughout the dive. The pair entered the water and remained side by side throughout the dive, conducting gas checks on a regular basis through hand signals, but the dive leader did not visually check the diver's contents gauge. Towards the end of the dive, still at a depth of 21m, the diver signalled he had 160 bar of gas remaining so the leader felt they had time to navigate to a further feature before ascending. At the next feature, the diver signalled he had 130 bar and so the leader decided he had sufficient gas to wait until the leader had deployed a DSMB. As the DSMB was deployed, the diver suddenly signalled out of gas and grabbed the leader's AS and started to breathe from it. The leader let go of the DSMB reel and gripped the diver by his shoulder strap. The pair then made a controlled ascent direct to the surface, omitting a safety stop. On surfacing, the leader supported the diver whilst he orally inflated his BCD and then towed him back to shore. Total dive time was 38 min.

February 2024 **24/011**

A pair of divers entered the water in calm conditions for a second dive after a surface interval of 211 min, with a planned duration of 30 min reported to the dive manager. After the pair had descended, the weather worsened with heavy rain, which caused the paper dive records to start to deteriorate and so the dive manager placed them in his rucksack and took cover in a nearby shelter with others who had completed their first dive. At 30 min into the dive, one of the divers signalled the lead diver they were now overdue but the leader misunderstood the signal and continued the dive. The pair surfaced after 45 min, having reached a maximum depth of 8m, and returned to shore. On spotting the pair surface, the dive manager retrieved his paper records and realised that the divers had exceeded their planned time. The lead diver apologised for exceeding the plan, whilst the dive manager apologised for not being alert to the overdue divers and taking action to try to locate the missing divers.

April 2024 **24/022**

A diver made a giant stride entry off a quayside and realised quickly that he had not zipped up his drysuit completely. He swiftly exited the water by the ladder to remedy the situation. The water temperature was 8 deg C.

April 2024 **24/026**

An instructor took two trainees in for their first open water training dive. The site was busy and as they found the 6m platform busy at the start of the dive they avoided it. Towards the end of the dive, they found the platform clear and so commenced to do BCD inflator hose disconnect exercises. A group of approximately 10 divers approached the area of the platform on the surface. Some divers held onto the marker buoys identifying the platform. A weightbelt was jettisoned from one of the overhead divers, landing onto the 6m platform. This was followed by another weightbelt. It appeared the overhead divers were conducting a weightbelt jettisoning exercise. The instructor moved her students well away from the platform area to continue their drills in safety.

May 2024 **24/074**

Two divers had conducted a dive the previous day to a maximum depth of 18m and a total dive time of 60 min. After a surface interval of 20 hours, the pair entered the water to dive a wreck at a maximum depth of 38m, both using nitrox 32. On the wreck, the pair penetrated the engine room and stirred up the silt, resulting in the pair becoming separated. After a search of the ceiling lasting about 6 min, one diver managed to locate an exit hatch, and left to rejoin his buddy, who had not entered the room, when he saw the visibility reduce. The buddy had been preparing to initiate a lost diver search by fixing a line in open water, and then returning to the engine room hatch and shining his torch into the room. The diver had seen this torchlight when he got within 30cm of the hatch. Both divers exited the wreck, recovering the line as they went. They checked gas contents and both had 140 bar remaining in their twin 12 lt twin-sets. The pair decided to follow the planned route specified by the skipper back to the shotline, ascend to 15m and then swim towards the reef. When the reef was not located after 4 min, the buddy deployed his DSMB from 15m. The pair had accumulated 12 min of unplanned decompression and completed stops at 15m for 1 min, 12m for 1 min, 9m for 1 min, and 6m for 9 min. The pair surfaced with a maximum depth of 38m and a total dive time of 60 min.

July 2024 **24/155**

A diver entered the water from a boat for a dive and discovered they had not fitted their weightbelt. The diver returned to the vessel, fitted the belt and completed a buddy check.

July 2024 **24/156**

Two divers became separated during a dive.

July 2024 **24/078**

A diver and his buddy completed a dive the day before on a wreck, both using rebreathers with trimix 20/20 diluent, to a maximum depth of 35m and a total duration of 53 min, including stops at 9m for 1 min, 6m for 4 min and 3m for 7 min. The buddy noticed that the diver's oxygen cylinder was low, and after the dive, asked him why, to which the diver responded that he always gets 3 dives from his oxygen cylinder. On refilling the cylinder, it was found to contain 5 bar and the technician advised the diver that because they only charged for oxygen per litre, it was unnecessary and potentially unsafe practice to run so low on oxygen. The pair then planned a dive for the following day to a wreck at 45m, with the seabed at 48m. The divers planned to stay on the wreck with a run time of 40 min. Both were using trimix 20/20 diluent in 3 ltr cylinders at 232 bar and oxygen cylinders filled to 232 bar. The diver had a bailout 7 ltr cylinder of air. The next day, the pair descended to the wreck, with the diver appearing to have an issue that the buddy considered was ear clearing but this was sorted. The diver was noted to clear his mask a number of times. The shotline was amidships on the wreck and visibility was 20m. The pair navigated to the stern along the starboard side and then followed the port side almost to the bow, where they reached their planned turnaround time to head back to the shotline, which could be clearly seen marked with strobes. At the point where they turned, the diver showed his buddy that he was out of diluent but the buddy considered they could still return to the shotline. The diver then gave an out of gas signal, which confused the buddy as he could not understand how that could occur using a rebreather at almost constant depth. The buddy

shouted at the diver to bailout to open circuit, and the diver switched his BOV to O/C, which the buddy knew would not work as it was fed by the now empty 3 ltr diluent cylinder. The buddy then pulled out his own bailout regulator, turned the cylinder on and offered it to the diver but it was refused. The buddy then checked the diver's diluent cylinder contents and confirmed it was switched on and was empty, so he switched the diver's BOV back to closed circuit. He also checked the diver's bailout cylinder for a direct feed that could be plugged into the manual add valve of the rebreather but there wasn't one. The diver was unresponsive and just staring past the buddy. The buddy considered that the diver was below minimum loop volume and so he connected his own spare direct feed connector into the diver's counterlung and gave it a good blast of air. He noted this showed a PO2 of 1.58 and he continued to try and get the diver to take his offboard regulator. The buddy then dragged the diver towards the shotline. Another diver known to the buddy was about to ascend the shotline. The buddy shouted to attract his attention and the other diver recognised there was a problem. The buddy signalled to the other diver to release the shot as they didn't want a difficult decompression stop as he had accumulated 23 min by this stage. The buddy then assisted the diver to ascend, but he was doing nothing to assist himself so the buddy had to control the buoyancy from the diver's counterlungs by operating the dump cord. The diver did open the dump valve on his drysuit briefly, but then immediately closed it again and so the buddy opened it again and prevented the diver from closing it. As they ascended, other divers had become aware there was a problem from the bubble pattern rising from below. As the pair reached them, the other divers were already prepared with their stage cylinders and a drop tank they had signalled the boat for. They weren't required but it was reassuring to the buddy. After completing a deeper stop and moving to 6m, the buddy offered the diver his nitrox 80 bailout, which the diver took and switched to. The other divers remained in the water after completing their own decompression in case assistance was needed. The buddy and the diver completed stops at 12m for 3 min, 9m for 3 min, 6m for 6 min and 3m for 12 min, and surfaced with a total dive time of 61 min to a maximum depth of 45m. A review of the sound from a video recording after the dive indicated that the diver was exhaling through his nose after every breath and the was ADV activating, which resulted in the diluent gas being exhausted.

August 2024 **24/171**

A diver had completed a dive to a maximum depth of 20m. On surfacing and preparing to recover into a dive boat, the diver lost a fin, and whilst passing their weightbelt into the boat, it was also dropped.

September 2024 **24/180**

A buddy pair were one of three pairs of divers who entered the water for a planned dive to a maximum depth of 30m. The pair achieved a maximum depth of 31m, which was in excess of their allowed maximum depth in the agreed project plan. The inadvertent extension was reviewed by the dive supervisor and groups reminded of the need to adhere to the plan. (linked to Incidents 24/166 & 24/179).

September 2024 **24/179**

A buddy pair were one of three pairs of divers who entered the water for a planned dive to a maximum depth of 30m. The pair achieved a maximum depth of 31m, which was in excess of their allowed maximum depth in the agreed project plan. The inadvertent extension was reviewed by the dive supervisor and groups reminded of the need to adhere to the plan. (linked to Incidents 24/166 & 24/180).

September 2024 **24/166**

A buddy pair were one of three pairs of divers who entered the water for a planned dive to a maximum depth of 30m. The pair achieved a maximum depth of 31m, which was in excess of their allowed maximum depth in the agreed project plan. The inadvertent extension was reviewed by the dive supervisor and groups reminded of the need to adhere to the plan. (linked to Incidents 24/179 & 24/180).

Equipment-related incidents

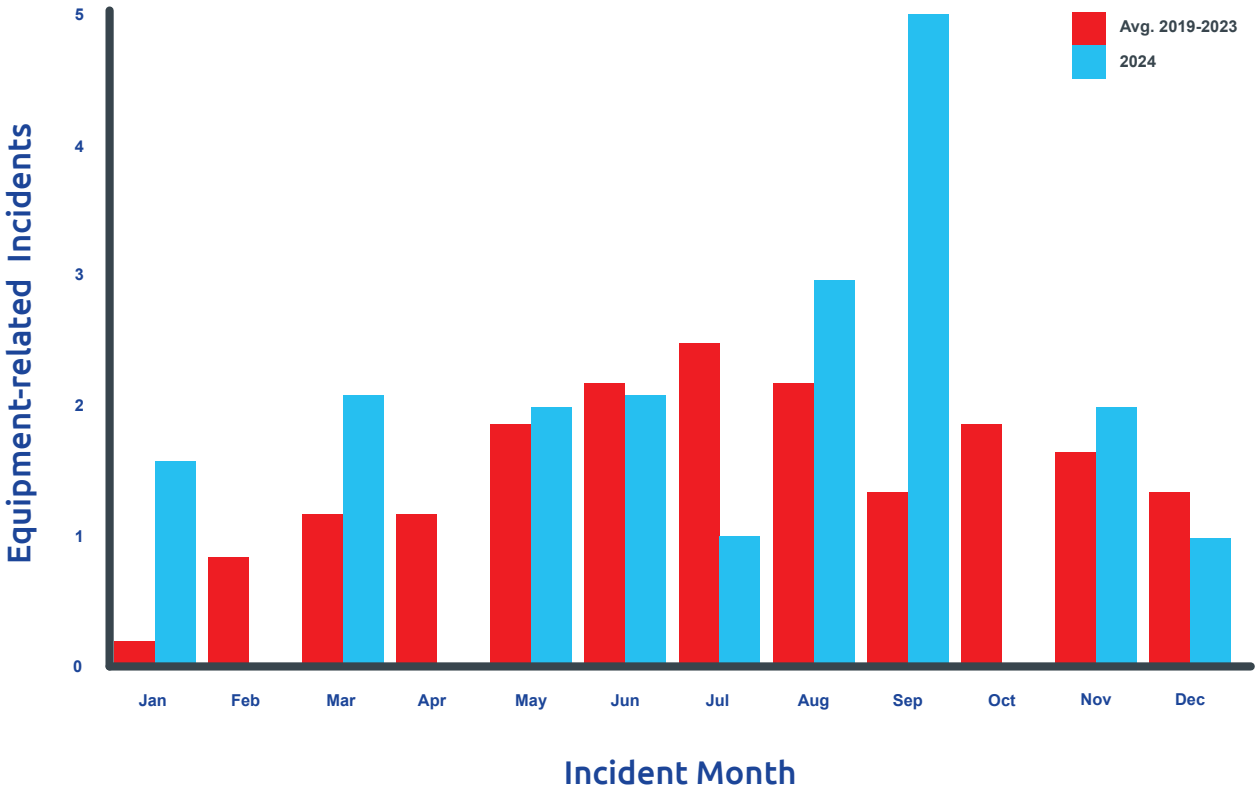


Figure 18
The month of occurrence of equipment related incidents

March 2024 **24/019**

A trainee who had completed all pool training and three open water dives, entered a swimming pool accompanied by an assistant instructor and a dive leader to practice controlled buoyant lift. The group completed a buddy check but it was considered rushed and there was subsequent confusion about the starting gas contents of the trainee's cylinder ranging between 70 and 120 bar. The trainee was wearing a weight harness and also carried a couple of weights in their BCD pockets as well. The pool was busy and so after descending to the deep end at 2m, the group moved slightly shallower to a less busy area of the pool at 1.5m. After 2-3 lifts without incident, it was pointed out to the trainee that they were over-weighted as evidenced by their BCD lifting off their shoulders. This had been pointed out to the trainee the previous week and they had been advised to get a crotch strap fitted, which the trainee had done by a local dive centre. The trainee was taken to the side of the pool and it was suggested that a weight pouch be removed, but due to a concern of becoming unbalanced, they decided to continue without removing weights. They signalled to descend and as the trainee dumped gas from their BCD, he suddenly ran out of gas. His buddies realised there was a problem when they saw him

finning hard to remain on the surface and as they swam up to him, he said "I'm out of gas, I'm really out of gas!". One of the buddies grabbed him to support him whilst the other offered his AS but this was refused. He was escorted to the side of the pool and showed signs of being out of breath, so they waited until his breathing had calmed down before making their way to the shallows and exited the pool. The incident was noted by others in the pool, including the training officer who made his way to the group and stayed with them until they were safely out of the water.

March 2024 **24/021**

A diver had completed three dives over the preceding two days using a regulator that was around 8 years old and had been serviced a month earlier. The three dives amounted to 73 min underwater without any problems. On surfacing after the third dive, the diver noticed some white grease visible on the first stage but assumed this was the result of brushing against something. The next day, the diver descended to a maximum depth of 28m. On entering the water, she heard some bubbling and assumed that the O-ring was not set properly, and checking her contents gauge, there did not appear to be excessive gas loss and so she decided to continue the dive. Towards the end of the dive, the diver used her AS to deploy a DSMB and noticed that she only had 50 bar remaining, when she would normally expect to have twice that amount. She decided to check that her pony regulator, also recently serviced, was working well, and switched to it. As she commenced her ascent, she heard increasing sounds of bubbles being released and her main cylinder emptied within seconds. The diver continued direct to the surface, omitting safety stops as she was concerned a ruptured hose would impact on buoyancy. On the surface she had sufficient buoyancy, with the support of the DSMB, and was able to monitor her buddy who was reeling in the DSMB and completing her safety stop. On returning aboard the boat, the diver checked her regulator and hoses and all looked fine apart from more white grease being visible on the first stage. As she released the A clamp, the first stage fell into two parts and fell on the deck. With the assistance of the boat skipper and a fellow diver, the regulator was reassembled and the central bolt holding the two parts together was found to be loose and so was tightened. The regulator was used for three further dives without any problems.

May 2024 **24/042**

A buddy pair planned a drift dive, deploying a DSMB from the bottom after descending. The less experienced diver wanted to practise deploying the DSMB but was having difficulty inflating the buoy as he was not getting his AS into the opening properly. Eventually the DSMB was deployed, but by this time the diver's AS was free flowing and the diver seemed unaware of the consequences at their depth of 20m. The more experienced buddy tried to stop the free flow by inverting the mouthpiece, shaking it and putting it in his mouth, all to no avail. The buddy signalled the diver to discard the DSMB reel to avoid any entanglement and task loading and donated his AS to the diver. The buddy then turned the diver's cylinder off and then back on again and the free flow had stopped. The pair checked the remaining gas and found there was 60 bar remaining. The buddy instructed the diver to switch back to his own regulator and the pair aborted the dive. They ascended normally, with the buddy monitoring the diver's gas throughout the ascent, and the pair surfaced with a total dive time of 10 min to a maximum depth of 20m. The diver had sufficient gas to get safely back aboard the boat.

May 2024 **24/036**

A diver prepared his rebreather for a dive following the manufacturer's instructions. The diver entered the water with his buddy to dive a wreck at 15m. Approximately 15 min into the dive, the diver noticed that his buoyancy was not as good as usual. He assumed this was due to recent open circuit diving as opposed to CCR diving. This developed into a 'this really doesn't feel right' feeling as he could feel that the unit was moving around on his back much more than usual. The diver had equipment clipped off to both a wing d-ring and the rebreather rail tail. The diver moved all equipment to the rail tail which seemed to improve the stability of the unit. Towards the end of the dive, the diver injected some more gas into the wing and felt the unit lift off his back, leaving him behind. He quickly vented gas from the wing but the unit now had a lot of movement on his back and didn't feel secure. He signalled to his buddy that he had an issue and needed to ascend. The pair ascended up the shotline which was a short distance away. With flat trim and ensuring he only used his drysuit for buoyancy, the pair carried out a normal ascent, including a safety stop at 6m. The diver was able to remain on the unit throughout the ascent. Everything stayed together whilst coming up the boat lift and only when the diver got out of the unit, did he find that the harness fell on the floor, leaving everything else behind. It became apparent that the eyelets on the harness were missing and the harness had been pulled through the mounting bolts. It was assumed that the eyelets had corroded and fallen out. The dive had been to a maximum depth of 15m for a total duration of 52 min, including a safety stop at 6m for 3 min.

June 2024 **24/153**

A diver had completed a dive to a wreck at a maximum depth of 30m. During the ascent at a depth of 18m, their computer failed and the diver switched to a second computer and aborted the dive. The faulty computer was returned to stores for investigation.

June 2024 **24/098**

A diver had completed an uneventful day diving and in the evening was eating in a restaurant, which had no internet signal, when he received a text from UK Rescue asking him to click a link to share location with UK Coastguard. Before he could do so, his phone rang and it was the Coastguard asking if he was safe. He assured the Coastguard that he was, and he was informed that his PLB had been activated, and requested that he check it. As the diver headed to his car to check, two Coastguard staff arrived. Together, they retrieved the PLB canister from the diver's car, and upon opening the canister, found it to be half full of water. The diver and Coastguards deactivated the beacon, and the Coastguard confirmed with a Lifeboat station that they were no longer receiving pings from it. The lifeboats then stood down and returned to base. The CG suggested the diver wrap the PLB in tinfoil to avoid any further activation. Subsequently, the diver contacted the PLB manufacturer, who advised he should send it in for service. The service results came back that the battery needed replacement but there were no other problems. Additionally, the diver contacted the canister manufacturer who advised that the O rings should have been replaced every year (these were 3 years old) and they should be inspected after every dive.

July 2024 **24/158**

A diver conducted a wreck dive to a maximum depth of 30m. During the descent, the diver realised that his suit was leaking through the zip. This was subsequently identified as due to the zip not being fully closed, resulting in a slight opening left. The diver did not encounter significant flooding, and so continued with the dive, surfacing without further incident with a total dive time of 45 min.

August 2024 **24/097**

A diver was conducting a depth progression dive with an instructor and another diver. The group had descended to 20m and did a gas check before progressing to their planned maximum depth of 25m. As they reached a depth of 24m, the additional diver had a free flow and the diver responded immediately to provide an AS before the instructor was aware of the problem. The two divers had been practising the skill the week before. The instructor was using twin cylinders and so provided her own AS and then turned the diver's cylinder off to stop the free flow and they conducted an AS ascent. On surfacing, the group were 3/4 of the way across the lake and so the instructor signalled the site rescue boat to assist the diver who had the free flow back to shore. The diver's cylinder was found to have 50 bar remaining and the diver had 76 bar remaining. Inspection of the diver's regulator found particles from the deteriorating regulator hose in the first and second stages.

August 2024 **24/071**

An instructor and a student had completed a first training dive to a maximum depth of 7m with a total duration of 26 min. After a surface interval of 114 min, the pair entered the water for a second training dive and swam on the surface to a fixed shotline marking a training platform and descended onto the platform. After some initial skills practice, the instructor demonstrated a regulator ditch and retrieve but was unable to recover the regulator because it was free flowing and snaking about behind him. The student indicated to the instructor that it was behind him, and appeared as if he was going to reach for it. The instructor signalled him to stop, and switched to his own AS. He then allowed the student to retrieve the DV, and he handed it to the instructor, still free flowing. The instructor noticed the Venturi lever was half way between + and -, and moved it to -. He then tried to stop the free flow by blocking the mouthpiece, but to no avail. The instructor signalled out of gas to the student, and took his AS. The pair conducted a well-controlled AS ascent, and the student provided surface buoyancy whilst the instructor inflated his BCD, partially using the direct feed and partially orally. Once positive buoyancy was established, the instructor asked the student to turn the instructor's cylinder off then on, which resolved the free flow; however the cylinder pressure was 20 bar so the dive was aborted, having completed a dive to 6m with a total dive time of 5 min.

August 2024 **24/214**

A diver and his buddy prepared to dive from a RHIB and the diver asked another diver to turn his gas on. The pair completed a buddy check and it was confirmed that both had breathing gas available. The pair then entered the water, and again, the diver had gas to breathe before descending the shotline. The diver's buddy descended to the bottom of the shotline and was waiting for the diver, who had started his descent. The RHIB came round again and deployed three more divers, and shortly after they descended, the cox'n saw the diver surface without a regulator in his mouth, accompanied by the three divers. The diver appeared to be in a state of panic and the cox'n shouted to him to put his regulator in, to which he replied he had no gas and was holding onto the shotline. One of the three divers then was seen to be turning his cylinder on and the diver replaced his regulator and was able to breathe. The diver reported that during the initial descent, he had been entangled in the shotline and then couldn't breathe. The buddy surfaced shortly after and the pair decided to abort the dive. During a debrief, it was thought that the diver who had turned the diver's cylinder on had actually closed the valve and then turned it a quarter turn back, and that the entanglement with the shotline then closed the valve again. The diver had conducted a dive to a maximum depth of 3m for a total duration of 5 min.

September 2024 **24/165**

Whilst preparing for a dive, a leak was identified in the HP hose connection crimping on pre-dive checks. The hose was replaced and predive checks confirmed all well. Dive proceeded without further incident.

September 2024 **24/162**

A diver conducted a wreck dive to a maximum depth of 36m. During the descent, the diver realised that his suit was leaking through the neck, which was subsequently identified as due to an incorrect neck seal donning process. The diver did not encounter significant flooding and so continued with the dive and surfaced without further incident with a total dive time of 58 min. The diver found they had a wet undersuit and dried out both suits before conducting a second dive as planned.

September 2024 **24/163**

During a wreck dive to a maximum depth of 36m, a diver deployed a DSMB from 18m when the line snagged. The diver released the snagged DSMB and ascended with their buddy under a second DSMB.

September 2024 **24/164**

During a dive to a wreck, having reached a maximum depth of 12m, a diver's rebreather CO2 alarm went off so the dive was aborted, and the diver surfaced after a total dive time of 12 min.

September 2024 **24/167**

During a dive to a wreck at a maximum depth of 38m, a diver experienced a flooded drysuit due to the failure of a dry glove O ring/fitting. The diver returned to surface via the shotline for stability during ascent and at surface. The diver surfaced with a total dive time of 38 min.

November 2024 **24/104**

Two experienced dive leaders were enjoying a planned runtime of 60 min in a shallow quarry. Around 40 min into the dive, one diver felt the mask strap "ping" and the mask went loose. The diver instantly applied pressure to the glass to keep the water out and flagged the attention of his buddy to make him aware of the situation. The diver then handed his camera to his buddy and retrieved the spare mask from his pocket. The diver then removed the broken mask and fitted his backup. Both divers continued the dive without further incident and surfaced after a maximum depth of 16m and a total duration of 61 min.

November 2024 **24/276**

Prior to a day's diving, a qualified diver had his regulator professionally serviced. The previous day, he had joined a group for a sea dive but aborted the dive after less than 2 min due to appalling underwater conditions. The next day, the group travelled to an inland site, and during a buddy check, the diver briefed his buddy that, in the event of an out of gas event, they should buddy-breathe from a single regulator. This surprised the buddy as they believed this technique was no longer advocated. As the pair waded into the water, but before descending, the diver's regulator second stage detached from the hose, causing a massive loss of gas. The diver left the water and got changed and left the site, and did not return for the next day of diving.

December 2024 **24/115**

A diver was carrying out a depth progression dive to 25m with her instructor and remained at the target depth for approximately 5 min, before ascending to 20m to continue the rest of the dive. The diver was leading the dive when she noticed her regulator had gone into free flow. She immediately signalled to her buddy, who then donated his AS. The pair decided to abort the dive and began a controlled ascent, at an appropriate speed. The pair performed a safety stop at around 6m. After completing the stop, the pair ascended slightly quicker than ideal but remained within safe limits before surfacing without further incident. Upon reaching the surface, the pair alerted the surface support to the issue. After inflating her BCD and her buddy turning off her gas, the pair swam to the exit point, where both confirmed that they were both well. The pair had conducted a dive to a maximum depth of 26m for a total duration of 17 min, including a safety stop at 6m for 5 min.

Illness or injury-related incidents

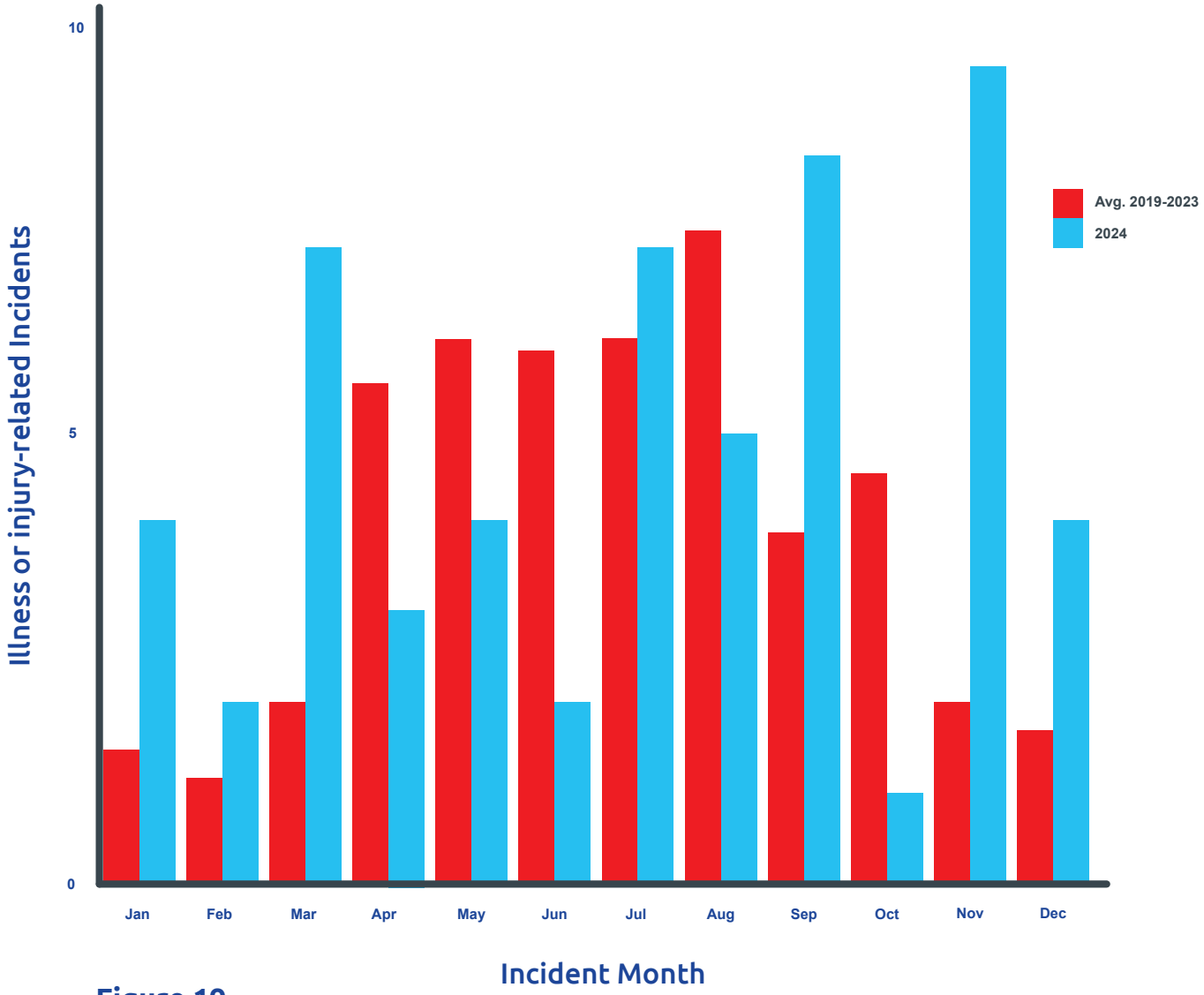


Figure 19
The month of occurrence of incidents involving injury

January 2024 **24/001**

Whilst checking water access at a new dive site as part of the pre-dive risk assessment, the dive manager slipped on frozen algae on the rocks at the access point. The dive manager sustained minor cuts and abrasions as a result of falling over but did not require first aid treatment. The dive manager aborted the proposed dive at that location, and relocated the group to a different, known dive site.

January 2024 **24/232**

A diver had conducted a dive to a maximum depth of 22m and had ascended to 5m for a safety stop when they started to suffer from a loud, continuous cough. The diver separated from the group and was recovered from the water after a total dive time of 33 min. The diver was transferred to hospital, where they were treated for Immersion Pulmonary Oedema (IPO) for three days before being discharged.

January 2024 **24/233**

A diver had descended to a maximum depth of 12m using an underwater scooter when they felt their ear pop and experienced ear pain and nausea and aborted the dive and surfaced after a total dive time of 3 min.

January 2024 **24/002**

Two divers were on their way to a dive site when they stopped at a supermarket for a drink. When they arrived, they found an elderly lady (80) sitting in a chair with people saying she had taken ill. The pair found she was going a purple colour and her condition was deteriorating. The divers got someone to call the emergency services and talked to the woman to keep her awake. When they were told an ambulance would take 90 min to arrive, they decided to administer oxygen from the set they were carrying. The lady had been panicking, but after 10 min on oxygen, her condition improved and she wanted to go home, but she was advised to wait for the ambulance. (Media report only).

February 2024 **24/234**

Following a dive, a diver had ascended to 6m and experienced pain in their ears moving from right to left and surfaced after a total dive time of 35 min.

February 2024 **24/005**

Over the course of a weekend, an instructor and two students had conducted a series of four training dives. On the second day, a first dive was conducted to a maximum depth of 11m for a total duration of 25 min. After a surface interval of 149 min, the group entered the water for a planned dive to a maximum depth of 13m. Once the instructor and the first student had entered the water, the second student complained that her regulator mouthpiece was broken and she was not happy with the feel of it. The mouthpiece was replaced with a new one by the shore support team and the second student entered the water and the group descended to a depth of 10m. The group conducted a gas check and the instructor ensured all were settled and were comfortable with their buoyancy. The group then navigated around a number of underwater features, conducting regular gas checks. Around 8 min into the dive, the instructor turned round and noted the students did not seem to be following and on turning further, saw the first student appeared to be conducting a controlled buoyant lift on the second, who had her eyes shut but was breathing. The instructor then took control of the controlled buoyant lift and began an ascent, during which, after ascending 3m, the second student opened her eyes but did not respond to signals. The group ascended direct to the surface, omitting a safety stop. On surfacing, the instructor fully inflated the unresponsive student's BCD and then their own BCD, whilst the first student made themself buoyant. By this time, the second student was conscious and responsive but was becoming upset, and so the instructor quietly summoned assistance. The instructor towed her to the side whilst reassuring her and she was de-kitted and assisted from the water. The student reported that she had felt underwater as if she was "swimming through treacle". The diver was assisted to change out her drysuit into warm, comfortable clothes and monitored for signs and symptoms of DCI or IPO. The diver's equipment was checked and the breathing resistance control knob was found to be set to the greatest resistance but all other equipment was working correctly. Both students were monitored for signs and symptoms including for shock, for three hours post incident and then allowed to return home with advice to contact any of the instructors if any symptoms or concerns arose.

March 2024 **24/116**

A diver had completed a dive without incident to a maximum depth of 34m for a total duration of 37 min, including a safety stop at 5m for 3 min. The diver had returned to his car and de-kitted when he fainted. It was discovered that he hadn't eaten or drunk much throughout the day. The diver regained consciousness quickly and was given oxygen and a cup of sugary tea. The diver reported that his finger tips felt painful but this was put down to the water temperature and length of dive.

March 2024 **24/009**

A diver and her buddy aborted a dive at a maximum depth of 6m after her foot became loose inside her drysuit, making finning difficult, and the pair surfaced with a total dive time of 10 min. The pair were returned to shore by boat and the dive manager noted the dive profile showed a gradual normal ascent and no abnormalities reported. Over the next three hours, the diver reported feeling slightly cold and nauseous but was well wrapped up with multiple layers and had been basking in the sun with minimal wind chill. The diver reported having swallowed a small amount of water and was offered first aid but she refused. At 3pm, the boat returned with the second wave of divers and the diver was seen helping others with their equipment. Shortly after, the dive manager was notified that the diver was looking and feeling really unwell and was found to be confused and to have slowed responses. The diver was placed on oxygen despite the diver resisting initially, and the Coastguard was notified. After 10 min, the diver complained of the oxygen regulator being difficult to breathe from and so was switched to constant flow at 6 l/min. The Coastguard arranged a link call with a diving doctor who advised urgent transfer to a diving medical facility and the Coastguard tasked a rescue helicopter due to a lack of available ambulance. Half an hour later, an ambulance arrived and transferred the diver and her buddy to a helipad at a local hospital where they were transferred to a helicopter for transfer to a recompression facility. The diver was assessed at the chamber and given a diagnosis of hypothermia and cleared to return home with advice on how to self-monitor for any changes in condition. The next day, the diver reported feeling unwell with a headache, chest tightness, drowsiness, high fever and raised blood pressure. She reported to a minor injuries clinic who assessed that she had a viral infection and she was discharged home. Two days later, the diver reported knee pain and reduced sensation in

her lower leg and she was advised to contact the National Diver Helpline who advised that due to her diving history there were no concerns that the symptoms were diving related.

March 2024 **24/010**

A diver was taken to hospital after emergency services rushed to a marina. (Coastguard report).

March 2024 **24/024**

A student attended her first pool training session. As she descended to a maximum depth of 4m, her ear 'popped' and she experienced some discomfort during the descent. She had no pain or other issues at the time and completed her training in the pool. Later that evening, she experienced some pain in her ear. She subsequently got it seen by a doctor and they said she had perforated her ear. She has been recommended to have between 1-2 months away from diving.

March 2024 **24/222**

Towards the end of a dive to a maximum depth of 18m, a student was approaching a safety stop when at 8m, she lost control of her buoyancy trim and switched to her AS. The instructor noticed the lack of trim and that she had switched to her AS and moved closer to her. The student signalled that she wanted to ascend, and the pair made an ascent direct to the surface, omitting a safety stop. On the surface, the student coughed blood and so the instructor towed her back to the exit point whilst alerting the on-site rescue team. Once recovered from the water, the diver was placed on oxygen. After the diver had calmed down, the instructor asked the student about the blood and discovered it was from a cut on her lip.

March 2024 **24/117**

A diver was underwater and had ascended to 6m when he experienced pain in his arm. After surfacing, he reported that his arm didn't feel right and then his arm started to spasm, causing severe pain. A click in the arm was heard and the pain stopped after the clicking had been heard. First aid, including administering oxygen, was given and the on site team advised who carried out checks but could find no clear injuries. The diver was advised to contact a recompression chamber for advice and left the site in his own vehicle.

March 2024 **24/223**

A student had been carrying out a drysuit orientation course in a swimming pool. Whilst removing the suit, the student dislocated her shoulder and was unable to relocate the joint and was in severe pain. An ambulance was called and arrived 90 min later. The diver was given Entonox and the shoulder popped back into place when she sat up. The ambulance crew assessed her and recommended she go to hospital for further evaluation. The diver later confirmed she was fine and pain free and had a follow-up appointment for her shoulder.

April 2024 **24/028**

A diver had joined a dive trip on a liveaboard boat. In the preceding 9 months, he had experienced a stressful time at work, which had resulted in a number of symptoms, including sleepless nights, tinnitus and tightness in his chest. He had hoped the dive trip would help alleviate this stress, but had difficulty sleeping the first night with his work still on his mind. On the first day of diving, he was paired with a buddy he was not familiar with for a shakedown dive for the group on a wreck at a maximum depth of 24m. After about 40 min into the dive the diver's buddy lost control of his buoyancy and was grabbing the rail, with his feet up and signalling that he wanted to ascend. The diver signalled that they were close to the shotline about 3m away but the buddy signalled again that he wanted to ascend immediately. The diver deployed his DSMB and offered the reel to his buddy to go up on. His buddy did not take the reel as intended but grabbed the line and made a fast ascent from 12m direct to the surface, omitting safety stops. The diver was trying to make sense of what had happened and was pulled up from 12m to 7m. His dive computer was beeping and indicated that a penalty of 2 min of decompression stops had been applied. Realising his buddy was pulling on the buoy on the surface, he unlocked the reel and descended to 12m, and waited for the buoy to be free again before ascending. He completed 5 min of stops at 6m and surfaced with a total dive time of 52 min. After a surface interval of 180 min, the pair entered the water for a dive on another wreck at a maximum depth of 27m. After swimming around the wreck in poor visibility, the diver checked with his buddy after approximately 25 min and found he had accrued 6 min of stops. The diver assumed this may be because of his ascent on the previous dive but he was also using air, where the diver was using nitrox 32. The pair completed a stop at 6m for 5 min and surfaced after a total dive time of 37 min. On surfacing, the diver spotted the boat against the sun and the diver set out to meet the boat, having misunderstood the signal. This resulted in him having fin hard to reach the lift and he found his heart was jumping. On recovery aboard, the diver made his way to the bench and felt his breathing was very fast and his heart racing. He tried to take it easy de-kitting but when he tried to unclip his BCD he found his hand was numb and he was unable to release the clip. He tried to move the cylinders back on the bench but felt he had no strength in his left arm. When he stood and tried to walk, he found his leg was numb as well, panicked and called for help. He was placed on oxygen and regained control of his arm and leg shortly afterwards. The Coastguard was alerted and a lifeboat was alongside around 30 min later. In liaison with a diving doctor, a helicopter was tasked and transferred the diver to a recompression chamber for assessment. He did not receive recompression treatment as symptoms

had resolved by the time of arrival at the chamber. The doctors believe that the diver had suffered a brief neurological DCI caused by a combination of factors, including spiked blood pressure due to stress, rapid ascent on the first dive and physical exertion swimming to the boat on the second dive. (Linked to Incident 24/275).

April 2024 **24/242**

Coastguard responded to reports of a diver with a medical problem. (Coastguard report).

April 2024 **24/025**

Two divers entered the water from a boat to dive a wreck at a maximum depth of 25m. On reaching the wreck, they had zero Viz, and after 10 min the pair decided to surface. One diver deployed a DSMB but became entangled in his own line. His buddy tried to help but also became entangled. After a while, they resolved the entanglement but had now made an uncontrolled ascent to approximately 5m. The buddy managed a 1 min safety stop but the first diver was unable to and surfaced. When recovered by boat, both divers said they were fine and did not mention any issues on the dive. During the journey back to marina, the first diver experienced tingles in his limbs, had slurred speech and seemed very drowsy. He was placed on oxygen and monitored to see if he improved. Some initial improvement was noted and the boat made best speed back to the marina, whilst the diver remained on oxygen. The boat arrived back at the marina about 7 min later. The diver was considerably better and so was laid down and continued on oxygen. The diver refused further medical help and elected to go home now feeling much better after about 20 min of oxygen. They reported no further effects the next morning and his buddy experienced no signs or symptoms of DCI.

May 2024 **24/031**

A diver was on a club trip for three days and had completed two dives the previous day, each of 30 min duration. The group planned to dive a wreck as the first dive the next day. As the current was quite strong, the skipper advised that he would drop divers approximately 50m up current and with a negative entry they would drift onto the wreck. Most divers got a glimpse of the wreck before drifting past it. The diver was seen by others at 25 min into the dive and had deployed his DSMB and he and his buddy ascended to conduct a safety stop. Towards the end of the safety stop, the diver was finding it hard to breathe and surfaced shortly after, where he started coughing up blood, was foaming at the mouth and had pulled his neck seal open as his breathing got more difficult. His buddy alerted the boat, which came alongside and quickly recovered the diver aboard. The trip organiser came aboard the boat shortly after and found the diver in a lot of distress, vomiting and wanting to go to sleep. The diver was placed on oxygen and a call was made for an ambulance, whilst the boat made for shore, An ambulance arrived shortly after the boat reached the shore and examined the diver, and following consultation with a doctor, took the diver to hospital for further assessment and tests. Tests indicated that there was evidence of fluid in the diver's lungs and an IPO was suspected. A diving doctor was consulted, who confirmed the likelihood of an IPO. The diver was kept overnight with his oxygen levels being monitored and was discharged the next morning with advice not to dive again until he has further tests and consults with a specialist in IPO.

May 2024 **24/017**

A group of divers had booked a dive charter vessel. A week before the trip, the group was contacted to say that the charter vessel would not be available. However a similar boat was available, although it was not specifically set up for dive charter and did not have a diver lift but had a ladder instead. The group agreed to continue with the planned trip with the alternative vessel. Entry to the water from the deck was through both a side gate and a rear door. The side gate had a slight step. As diving started, several of the divers were already in the water, when one buddy pair prepared to enter. The first diver entered the water through the side gate and swam clear to allow his buddy to follow. As the buddy prepared to enter, his fin caught on the lip of the step and his supporting leg slipped from under him and gave way. The diver fell face down onto the step with his chest taking the full impact, and then he fell head first into the sea. The first diver saw him fall and swam quickly towards him to check he was alright. He did not receive a response, and although the diver's eyes made contact with him, there was no other communication. The first diver made his buddy buoyant and towed him back to the boat. The deckhand requested the diver be de-kitted and his weights were removed and handed up first, followed by the diver's wing and cylinders. A second dive boat arrived, which had a diver's lift and so the injured diver, who was now more responsive, was assisted by the first diver to swim to the second dive boat and was recovered from the water using the lift. The diver was attended to by a trained medic from the divers aboard the second boat. Due to his poor responses, a lifeboat was called to return the diver to shore where he was transferred by ambulance to hospital. The diver was placed on oxygen by the lifeboat crew. The diver had several tests but was released from hospital with moderate bruising to his chest and ribs. The diver was assisted by group members to return home and has reported no major ill effects since.

May 2024 **24/018**

A diver and his buddy joined an evening dive to a wreck. They were running late and on arrival immediately boarded the RHIB and set off. On arrival, on site two shotlines were deployed, but the deeper one was off the wreck. The pair were dropped on the second shallower shotline and descended to find the shot not on the wreck. The buddy led the dive, attempting to find the wreck. The pace was faster than the diver was comfortable with and he signalled for him to slow down. The pair continued searching for the wreck and the diver felt his gas consumption was higher than normal. He was concerned that although they had agreed to carry out 2 min of decompression stops, it seemed pointless given they had not found the wreck. The pair had been briefed to each deploy a DSMB and although he was reluctant to use extra gas in deployment, the diver decided to comply. During the ascent, the diver's computer sounded an alarm to indicate his gas contents had fallen to 90 bar and a short time later the alarm for 50 bar remaining, sounded as they reached 10m. The diver indicated his gas contents to his buddy and the buddy offered his AS but the diver instead switched to his pony cylinder. By this time, the diver was experiencing 'tunnel vision' and his thoughts were a little fuzzy and confused. The buddy again offered his AS and this time the diver switched to it. The pair completed their decompression stops and then the buddy signalled to ascend. On surfacing, the diver was informed later that he had orally inflated his BCD but had no recollection of this. Following this, the diver struggled to retain his regulator in his mouth as it kept falling out and felt like it was out of his control. The buddy kept telling him to put his regulator back in his mouth. The diver was struggling to reel in his DSMB line and so when his buddy offered to take it, he passed his reel over and then passed out. The diver was recovered into the RHIB and emergency services were called. The Coastguard initiated a large-scale response, including a lifeboat, a warship, two helicopters and two ambulances were involved in transferring the diver to hospital. The diver was given oxygen and the RHIB returned to harbour, where he began to regain consciousness but had difficulty breathing. The diver was assisted by a lifeboat crew and then transferred to hospital by ambulance. The diver was diagnosed as having suffered from Immersion Pulmonary Oedema (IPO).

May 2024 **24/073**

A diver and his buddy were on a wreck dive that required slack water. On descending shotline, to the wreck, the pair were surprised to find a quite strong current causing them to pull themselves down the shotline. The pair had intended to return to the shotline with 1 min no stop time remaining and then explore the area around to shot until they had accumulated 5 min of decompression stops. As the pair returned to the shotline at a depth of 33m, the diver immediately began ascending the shotline without signalling his buddy. His buddy followed and the diver was initially ascending at a steady rate, but at 20m, the diver seemed to be coughing and spluttering and set off quicky for the surface. The buddy ascended at a steady rate as he could see the diver above him and assumed he was at a safety stop. Only when the buddy reached 6m for a safety stop, did he realise that the diver was on the surface. The buddy completed a safety stop for 3 min as he could see that the boat was alongside and recovering the diver. The diver had completed a dive to a maximum depth of 35m for a total duration of 17 min, and was in distress on the surface and clinging to the shot buoy. He was de-kitted and assisted aboard the boat and placed on oxygen. He had blue lips and a greyish pallor and was finding it hard to breathe and coughing up a brownish mucus. The diver was unable to breathe from the oxygen demand mask and so was switched to a constant flow mask. The cox'n of a second boat had made a 'Mayday' call to the Coastguard and continued to liaise with them. The Coastguard tasked an ambulance and a rescue helicopter to rendezvous with the boat's harbour base, and the boat made best speed whilst the second boat remained in site to recover the remaining divers who were still underwater. On return to shore, the diver had recovered most of his colour back, although he was still complaining of difficulty breathing and coughing. The diver was transferred to the helicopter, together with his wife who had been contacted, and he was airlifted to hospital where he was treated for fluid on the lungs and kept under observation.

June 2024 **24/037**

Two trainees were taken for their first open water training dive. After completing some surface exercises, the group descended to a 2m platform. The pair adjusted their buoyancy and were able to swim across the platform, maintaining their buoyancy. When instructed to kneel on the platform, one of the students was unable to maintain a kneeling position. The group then left the platform, swimming for 7m to the side achieving a maximum depth of 3m. Both students maintained good buoyancy control. The instructor then added 1 kg to each of the BCD pockets of the student who had had the problem kneeling. As the group started to descend to the side, the student became disoriented and the instructor pushed him up to the surface, whilst the second student followed. The student reported experiencing a popping noise in his ear. The instructor aborted the dive and the group returned to the shore and helped the student to de-kit. The student was asked if he had any difficulty clearing his ears and he replied that he thought not and had not felt pressure in his ears at any point. Two days later, the student visited his GP who diagnosed a perforated eardrum.

June 2024 **24/226**

A student had completed a number of training drills and was just starting on an exploratory dive when he lost control of his buoyancy and made a rapid ascent direct to the surface, with a total dive time of 10 min at 6m. The diver complained of a tight chest and blue lips with crackly breathing and pink saliva. He was towed to shore and assisted from the water. An ambulance was called and the diver was placed on oxygen and the ambulance crew advised they suspected an IPO due to the blood in his phlegm. The diver was airlifted by helicopter to hospital for checks for a suspected IPO.

July 2024 **24/294**

The Coastguard responded to reports of a diver in need of medical assistance. (Coastguard report).

July 2024 **24/064**

A diver was at home preparing his diving equipment a few days before a diving trip. He found that he was unable to remove the back of his torch to access the rechargeable battery and experienced friction burns from applying force, but was unable to remove the back. The next day, he purchased a can of lubricating oil and applied it to the torch, leaving it to soak overnight. Still unable to remove the back, he applied another coat of the oil and left to soak for 24 hours. The night before the trip, the diver browsed the internet for solutions and found one video that suggested applying hot water to the torch. The diver immersed the torch in boiling water and left it for 15 min. In a hurry to finish packing, the diver removed the torch from the water and tried twisting it open again, but the torch was red hot and further burnt the existing friction burns. The diver held his hand under cold running water for 10 min. The diver's hand stung with moderate pain during the trip which he took painkillers for. The burn healed naturally over the next week.

July 2024 **24/227**

A diver surfaced after a dive to 21m for 6 min with their instructor, having swallowed water during a rapid ascent whilst their regulator was free flowing, and had surfaced without mask and hood. The diver complained of stomach pain and a taste of blood at the back of their throat and had pink phlegm. The instructor towed the diver to shore and he was placed on oxygen and the emergency services were called. An ambulance attended to transfer the diver to A&E and the diver was discharged 6 hours later.

July 2024 **24/247**

Coastguard tasked a lifeboat to respond to a diver with a medical condition. (Coastguard and RNLI report).

July 2024 **24/068**

A trainee was diving with an experienced diver who was also an assistant instructor and the pair had descended to a maximum depth of 20m. Part way through the dive, the trainee's mask was flooding. She tried to inform her buddy of the problem, she started to panic, inflated her BCD and made for the surface. The surface cover saw her surface and recovered her into the boat. Her buddy surfaced a couple of min later, and explained what had happened. The decision was made to administer oxygen, but on opening the container, found that the pocket mask had been removed. The boat made a fast return to harbour and the trainee and her buddy disembarked, and the trainee was transferred to hospital where she was placed on oxygen. No DCI symptoms appeared and the trainee was discharged later the same day.

July 2024 **24/228**

A student was on an open water training course when, towards the end of the final dive underwater, he cut his hand on the frame of a platform. The student signalled for assistance, and the group ascended to the surface, where it was identified that the cut required medical attention. After exiting the water, help was sought from the on-site team, who bandaged the diver's hand. The diver was then transported to a local A&E, where his hand was glued, and he received a tetanus shot.

July 2024 **24/067**

A dive support vessel reported to the Coastguard that a diver aboard had been taken ill following a dive. The Coastguard tasked a Coastguard helicopter, Coastguard rescue teams and an RNLI lifeboat to assist. The dive vessel made its own way back to harbour, to be met by an ambulance crew and a Helimed doctor. The diver was airlifted to hospital, but his condition was unknown. (Media report only).

August 2024 **24/305**

The Coastguard responded to reports of a diving vessel with a person aboard requiring medical assistance. (Coastguard report).

August 2024 **24/219**

During a pool session, there were a number of divers in the water, including two divers, who were in the deep end of the pool doing some basic skills and being observed by an instructor on the surface snorkelling, and a rebreather diver. The rebreather diver was swimming slowly around the deep end alone on his rebreather fitted with a full face mask, and the instructor noticed him pick up some hair bands and clips as he swam around the outside edge of the pool. The instructor noted the rebreather diver raise an arm when one of the two divers swam close to him; at the time, the rebreather diver was hovering just above the pool bottom, and looked to be in a relaxed position with his arms crossed. 5-10 min later, the buddy diver was seen to swim over to the rebreather and signal OK but

there was no response. The instructor realised something was wrong and duck dived down, and together with the buddy, pulled him to the surface and pushed him against the pool side, as the diver had no buoyancy and neither did the snorkeller. The rebreather diver's full face mask was still in place and his head was flopped forward, so the instructor decided to leave the mask in place and recover him from the water before attempting resuscitation. The instructor climbed out of the pool, and with the buddy pushing from below, was able to remove the diver from the water onto the poolside. The instructor removed the full face mask, which had not flooded, and the diver was grey and cyanosed, so he gave 4 rescue breaths before shouting for help, and the pool alarm was triggered. The rebreather was in the way for chest compressions, and the instructor could not see the clips to remove it, so he gave a couple more rescue breaths before a lifeguard arrived. The instructor then moved around to be above the head, and was then able to see the CCR clips, and removed the unit. The lifeguard started chest compressions, whilst the instructor provided rescue breaths directly, and then later via a pocket mask. An AED was called for, and another individual arrived from the gym and stated he was an ER doctor and took over the head and control of the situation. The casualty's chest was exposed by cutting the pool suit and the AED pads were applied. Once it said "analysing", the instructor stepped back and had no further input, except collecting the casualty's rebreather and computer and checking there was gas available. Emergency vehicles, including a helicopter, were soon on site and the casualty was placed in an induced coma and then transferred to a hospital intensive care unit. The casualty came round three days later and made a full recovery.

August 2024 **24/072**

A group of divers aboard their dive vessel spotted a diver from another vessel surface in distress. The distressed diver was seen lying on his back struggling and not responding to signals from the dive boat. As the boat was moving closer to the diver, his buddy surfaced 2 min after the diver had surfaced. The diver was unable to follow instructions to hold onto a guide rope at the side of the boat, and so another diver entered the water to escort the diver to the dive lift, whilst others aboard cleared space on the deck. The diver was recovered aboard, and a quick assessment found that he had made a rapid ascent to the surface from below 6m and was suffering from abdominal pain and struggling to breathe. He was placed on oxygen and his buddy was recovered aboard. Shortly afterwards, the diver began vomiting and the vomit was contaminated with blood. The skipper made a 'Pan Pan' call on channel 16 and the boat made best speed back to harbour. The buddy explained that prior to the dive, the pair had spent 15 min on the surface with some difficulties before deciding to continue with the dive. A few min into the dive, the diver then ran out of gas, and the pair started an AS ascent. During the ascent, the diver had taken on water and attempted to replace his own regulator, before breaking free and making a free ascent direct to the surface. The diver had been to a maximum depth of 30m and surfaced after a total dive time of 7 min. During the return to harbour, the skipper liaised with the Coastguard and divers monitored the casualty and reassured him to keep him calm. The Coastguard tasked a lifeboat that was on exercise nearby and they came alongside the boat and took over the care of the casualty. The Coastguard had also tasked a rescue helicopter, which was then stood down due to foggy conditions. The lifeboat crew continued care for the diver until the boat arrived back in harbour. The diver was transferred to hospital by ambulance and treated for secondary drowning before being discharged from hospital.

August 2024 **24/080**

A diver had completed two dives the previous day, and on one of the dives, she had lost buoyancy control and ascended direct to the surface in a faster than normal ascent, omitting a safety stop. The next day, after a surface interval of nearly 30 hours, she entered the water for a night dive with two buddies; one who was also an instructor, was leading. The lead diver led the other two out and descended. The diver initially had difficulty leaving the surface, but eventually managed to drop down to join the other two. During the first 15 min, the diver seemed to have difficulty maintaining her buoyancy and so the lead diver signalled to turn around and led the divers back towards the beach. About half way back to the shore the diver lost control of her buoyancy, and drifted to the surface from about 5m depth. The other diver followed immediately, with the lead diver following shortly after. On surfacing, the lead diver found the other directing the diver to the shore, where another group was shining a light as a guide. The diver was showing signs of distress, not moving and remaining vertical in the water, with her head just above the surface. As the lead diver approached her, she spat her regulator out and said she couldn't breathe. The lead diver was able to persuade her to put her regulator back in and he began to tow her back to shore. They were met by others from the shore party who helped the diver from the water and removed her equipment. The diver was calmed and told to breathe normally, which she did, and then was escorted up the beach to her vehicle. The diver retched a couple of times but insisted she was fine and returned to her accommodation. Shortly afterwards, the lead diver was informed by the diver's daughter that she had coughed up some blood. The lead diver went to her room and advised her to go to be driven to A&E where she was kept overnight and diagnosed with Immersion pulmonary Oedema (IPO).

August 2024 **24/081**

An experienced diver who was diabetic was going for a dive with another diver who had recently completed the rescue element to complete her second level qualification. The diver used a sensor under his arm to monitor his blood sugar levels with a phone app. On the way to the dive site, his levels were reading quite high. The pair entered the water and descend to a maximum depth of 7m to look for some features in the lake. After approximately 20 min, the buddy noticed the diver seemed to be floating towards the surface and was not responding to her signals. The buddy followed the diver to the surface and found him struggling to inflate his BCD and was not responding to her verbal commands. The buddy fully inflated the diver's BCD and commenced a tow towards the entrance/exit point from the water. The dive manager was on the side monitoring the dive while teaching a student the assistant dive manager role. Recognising the problem, the stand by diver was asked to go and help tow the casualty back. Once in shallow water, the buddy and stand by diver removed the diver's BCD, and with the help of others on the shore, lifted the diver from the water. While this was happening, on instructions from the diver's partner, a bottle of energy drink was collected from the diver's car. Other people at the site, unconnected with the group, also provide some sweets and a piece of pineapple. On questioning the diver was struggling to give his name and date of birth. He was able to drink the energy drink and eat the pineapple. While he was drinking, he was using the App on his phone. The blood sugar level was measured and found to be very low and the trace line was right at the bottom of the scale. The diver quickly recovered both mentally and physically and was able to walk to his car and remove the rest of his kit and suffered no lasting effects.

September 2024 **24/313**

The Coastguard responded to reports of a diver in need of medical assistance. (Coastguard report).

September 2024 **24/316**

The Coastguard responded to reports of a diving vessel with a person aboard requiring medical assistance. (Coastguard report).

September 2024 **24/216**

A group of divers, together with some non-diving observers, took a boat to a site at sea. The first site, at a depth of between 30m and 40m, was accessible to all but one diver, who had only recently gained her qualification but had not done any of the depth progression necessary to complete the dive. The rest of the group went ahead with the dive, leaving the less experienced diver behind. Subsequently, the group travelled to a shallower site and the inexperienced diver was partnered with an instructor, a rebreather diver, who had participated in the first dive. Shortly after entering the water and descending to a maximum depth of around 20m, the inexperienced diver noticed she had consumed more than half of her air supply. She communicated this to the instructor. After some delay, the pair ascended at a faster than normal but not a rapid rate. When the inexperienced diver signalled that she had less than 50 bar, the instructor signalled to finish the ascent, omitting a safety stop. After returning to harbour and leaving the boat, the instructor felt deep aches around his body. Over dinner, the group became increasingly concerned about the instructor, who was visibly unwell. Eventually, everyone said that the instructor should seek medical assistance, but the instructor insisted that he was fine. The instructor did not turn up for the second day's diving and he subsequently reported he had left early to take one of the observers home.

September 2024 **24/237**

A diver experienced pain in their jaw and cheek at a depth of 5m.

September 2024 **24/090**

A group of divers had been diving from a hardboat and had completed two dives. After the second dive, a pair of divers were being recovered aboard using a diver lift. The first diver had boarded, and as the second was being recovered, the boat had settled across the swell causing the boat to roll significantly. As the second diver came aboard from the lift, a crewman removed the diver's fins but one was knocked overboard. The crewman and others tried to recover the fin and the diver made his way unaided towards his seat in the middle of the boat, lost his balance and fell over. The first diver attempted to catch him, and in doing so, trapped her arm between her buddy and the boat. It did not hurt much at the time but she did notify the dive manager. Overnight, after returning home, the diver was woken by pain and noticed her arm was very swollen. On seeking medical attention and having an x-ray, she was found to have broken a bone in her wrist. The arm was placed in a plaster cast and the diver advised she might subsequently need to undergo surgery.

September 2024 **24/092**

A diver suffered a suspected seizure and blackout whilst underwater. They were recovered to the surface and the emergency services were called whilst the diver was being returned to shore. The diver was recovered from the water and placed on oxygen and put into the recovery position. An ambulance arrived, followed shortly after by an air ambulance. Once it was established that the depth and duration of the dive made it unlikely to have been DCI, the air ambulance was stood down and the diver was transported to hospital by ambulance. The diver was discharged from hospital later the same day.

September 2024 **24/101**

A diver had felt uneasy on a dive and surfaced at the far side of a quarry and signalled distress. A site rescue boat was launched and recovered the diver from the water and returned her to shore where she was placed on oxygen as a precaution. She had not made a fast ascent but it was thought that she may have had a contaminated fill. The dive centre tested the gas contents of her cylinder and the gas was found to be safe to breathe with no evidence of contamination.

September 2024 **24/094**

Whilst preparing to dive, a diver's mask had some grit caught in it and some entered her eye and caused an abrasion to the cornea. The diver was treated in A&E.

October 2024 **24/169**

During the descent for a training dive, a student experienced ear pain and the dive was aborted at 4m and the group surfaced with a total dive time of 10 min.

November 2024 **24/325**

The Coastguard responded to reports of a diver in need of medical assistance. (Coastguard report).

November 2024 **24/111**

A diver had not dived for a period of 12 weeks following a previous incident, where he was concerned he may have experienced Immersion Pulmonary Oedema (IPO). The diver had consulted medical advice and was undergoing investigations but had been advised he could undertake shallow easy dives. The diver had indicated to his buddy that he wanted to stay shallow and only conduct one dive. The plan had been for the group to do a dive late afternoon, followed by a night dive, but they were delayed in traffic and only arrived in time for the night dive. The diver entered the water with his buddy acting as dive leader, and the pair proceeded to explore the various features at a maximum depth of 6m and a brief dip to 8m. Towards the end of the dive, the group passed another group of divers. The buddy briefly was unable to distinguish the diver, but then spotted his bright yellow fins amongst the other group. Shortly after, as they passed a blue rope to the surface, the diver was spotted making a dash for the rope and ascending rapidly. The buddy immediately went after him and surfaced, next to a large orange float that the diver was gripping and shouting "I can't breathe". The diver was panicking and unable to recover his regulator so the buddy located it and replaced it into the diver's mouth. The buddy shouted at the diver to inflate his BCD, which he did, but he continued to repeat "I can't breathe". The diver was still gripping the buoy and was asked if he was capable of swimming back to shore, to which he replied "no", at which the buddy started to tow the diver back to shore, checking he was OK throughout and shouting for help and waving his torch. A site rescue boat was alongside shortly after. The diver was de-kitted and recovered aboard the boat and returned to shore, whilst the buddy swam ashore towing the diver's BCD. The diver was lifted from the boat at the shore by other divers. The group's dive manager, who was an ICU nurse, took over management of the diver who was breathing with white foam on his lips, and very pale with slightly blue lips and unresponsive. The diver's neck seal was cut open and oxygen was provided and he was placed in the recovery position, whilst an ambulance had been called. The diver was cut from his suit to allow listening to his breathing, which indicated good air entry, but with widespread crackles indicative of IPO, and with a fast breathing rate and an oxygen saturation rate of 93% despite being on oxygen. It took some time for the diver to regain consciousness, but his breathing rate slowed slightly, and he slowly became more responsive and began to answer questions and was eventually able to sit upright, which eased his breathing. An emergency responder arrived by this time and an ambulance arrived a short time later and transferred the diver to hospital, where it was confirmed he was suffering from IPO.

November 2024 **24/239**

A diver surfaced after a dive and found a cut on their hand, which they thought was on a rock near the surface. On examination the cut was deep and clean and believed to have been from metal on a plane wreck.

November 2024 **24/229**

A diver completed a training dive and, after exiting the water, complained of feeling light-headed and disoriented after removing their equipment. The diver sat with the group leader, who offered him a drink and some sugar. The diver experienced a mild headache on the left side of his head, which subsided after about 30 to 45 min of sitting down and drinking. When he returned home about two hours later, he noticed mild bruising on his chest and upper arms consistent with suit squeeze.

November 2024 **24/230**

A student completed confined water dives in a shallow pool, successfully demonstrating skills. She then practised buoyancy and ascents in a deeper pool (3.8 metres). After an ascent, she lost consciousness at about 2m but was quickly reached by her instructor. She regained consciousness and remained calm, with no signs of suffocation or drowning. After resting, she was monitored at the poolside, and her father was informed for transport. They were advised to visit the hospital for further investigation before diving again.

November 2024 **24/218**

A diver who had been experiencing anxiety following a previous DCI agreed to dive with a friend in order to mentally prepare for an upcoming training trip, and also conduct a weight check, as he had developed a habit after the DCI incident of carrying more weight than

necessary to avoid a fast ascent. The diver slept poorly the nights leading up to the trip, and travelled two hours on a busy train, at times forced to sit on the floor of the carriage, hurting his knees. After dinner, the diver and his friend drove for another three hours to their lodgings, arriving at 1am. On the morning of the first day of diving, the diver woke after four hours of sleep, feeling anxious, tired and unwell. His friend agreed to delay their journey to the dive site, limiting them to just one dive before the site closed, to let the diver try and rest, but he was unable to go back to sleep. The pair travelled for two hours, arrived at the dive site and prepared their kit. Taking into account the diver's fatigue, they agreed to keep the dive shallow and short and the pair conducted a dive over 35 min to a maximum depth of 8 m. During the dive, the diver felt ill-at-ease and drowsy; he spent some of the dive swimming with his eyes half-closed and his head down. The dive concluded with a short review of basic skills on a 2m platform and a weight check at standing depth, in which the diver's friend concluded that he was over-weighted by at least 10 kg. After the dive, others commented that the diver was shivering and appeared exhausted. On the journey home, the diver felt tired and nauseous. Upon getting back to the lodgings, he retired to bed, where he became tearful and started to hyperventilate. The following morning, the diver woke up after five hours' sleep. He felt nauseous and exhausted and had a headache and stomach ache. The diver and his friend cancelled the day's diving plans and the diver took a train home. The diver considered seeking advice from a chamber in case he was suffering from DCI but realised his symptoms existed before he went diving and so could not be DCI. The next day, the diver saw his own GP, who advised him to resume appointments with a therapist he had seen the previous year.

November 2024 **24/107**

A diver using a rebreather was diving with two buddies, who were diving on air with nitrox 50 for decompression. The plan was to dive to a maximum depth of 22m following the contours of the site, with the two buddies decompressing on their nitrox 50. About half way through the dive, the diver did a couple of coughs to clear his throat but otherwise everything was normal. When the group reached the end of the dive and started their ascent, the two open circuit divers did their gas switch to nitrox 50; the rebreather diver had no stop requirement. As the group progressed up to a 6m shelf from 20m, the rebreather diver started coughing a lot more and at this point he thought there was something wrong. The diver changed his set point to 0.7 and manually drove his PO2 level up to 1.2 for his 3 min safety stop. The group surfaced after a total dive time of 78 min. At the shore, the diver removed his stage cylinder and exited the water via some steps. As soon as the diver cleared the water and came off his loop, he wanted to cough to clear his lungs. The diver coughed up pink coloured foam and said to one of his buddies, "I can't breathe". The more the diver coughed, more and more foam came up. The diver then shouted to his buddy that he had an IPO and to go get him oxygen. The buddy helped the diver remove his rebreather, whilst the diver went onto the second buddy's nitrox 50 until the site rescue team brought an oxygen set. The diver continued coughing up pink foam between being administered oxygen. The diver was unable to breathe sitting down but found it easier on his knees. After a while, the group walked up to the diver's vehicle, where he sat on the rear boot while the team helped remove his drysuit. An ambulance arrived and transported the diver to hospital, where he was treated for Immersion Pulmonary Oedema (IPO). The diver was discharged from hospital after five days.

November 2024 **24/215**

An instructor, who had been experiencing anxiety following a previous DCI, missed a day of diving due to a total lack of sleep the night before. After a few hours' sleep the next night, he travelled three hours to a dive site, and on arrival, helped to unload equipment, including numerous cylinders for the group of 15 divers. He then prepared to dive with two students but shortly after descending, one of the students aborted the dive due to immediately getting cold because of a leaking drysuit. The instructor and the second student then continued with the dive with initial training in AS ascents before an exploratory dive to a maximum depth of 8m for a total duration of 43 min. During the dive the instructor, who was unfamiliar with the site, got lost and each time he believed he was navigating back to shore, came up against a new underwater object. The instructor became increasingly embarrassed and then anxious that he was unable to navigate back to the exit. The instructor ended the dive with slightly less than 50 bar in his cylinder, which was less than his student, who was on only their second open water dive. After the dive, the instructor again helped to load the group's equipment before driving back to an equipment store for 1 hour. He then again helped to unload some equipment before driving a further hour to a different store to unload the rest. The instructor then drove three hours to a friend's house to stay overnight before taking a 5 hour train journey home the next day. After arriving home, the instructor felt aches and soreness in his arms and shoulders, particularly in one arm where he had previously suffered DCI. At first, the instructor remained calm, believing that the problems had been caused by the physical exertion of the last few days. However, as time went on, the instructor sank into depression, worrying that this was DCI again. The instructor was reluctant to call the emergency services in case it was nothing more than anxiety. The instructor remained in a state of pain and melancholy, although the pain eventually faded. The instructor reported that he had experienced several nights of poor sleep prior to the trip.

November 2024 **24/211**

A group of divers formed a human chain to unload diving equipment from a vehicle to a storage unit. Whilst unloading, one diver handed another a weightbelt whilst holding onto the buckle end rather than the loose strap. A weight slid off the belt and landed on the second diver's foot. The injured diver continued to help unload the equipment but felt pain in his big toe for the rest of the evening. After returning home, the diver inspected his toe but did not believe it was broken. One month later, he noted the toenail had become discoloured and made an appointment with his GP, who diagnosed an infection. The GP explained that an injury could weaken the nail, causing reduced resistance to infection.

December 2024 **24/332**

The Coastguard responded to reports of a diver in need of medical assistance. (Coastguard report).

December 2024 **24/177**

A student experienced sinus pain and bleeding during training at a depth of 16m and was removed from course.

December 2024 **24/240**

A diver had completed a first dive to a maximum depth of 21m for 18 min. After a surface interval, the diver conducted a second dive to a maximum depth of 20m, then made an ascent direct to the surface from 6m and surfaced with laboured breathing.

December 2024 **24/178**

A student experienced sinus pain during pool training at a depth of 4m and was removed from course.

Miscellaneous

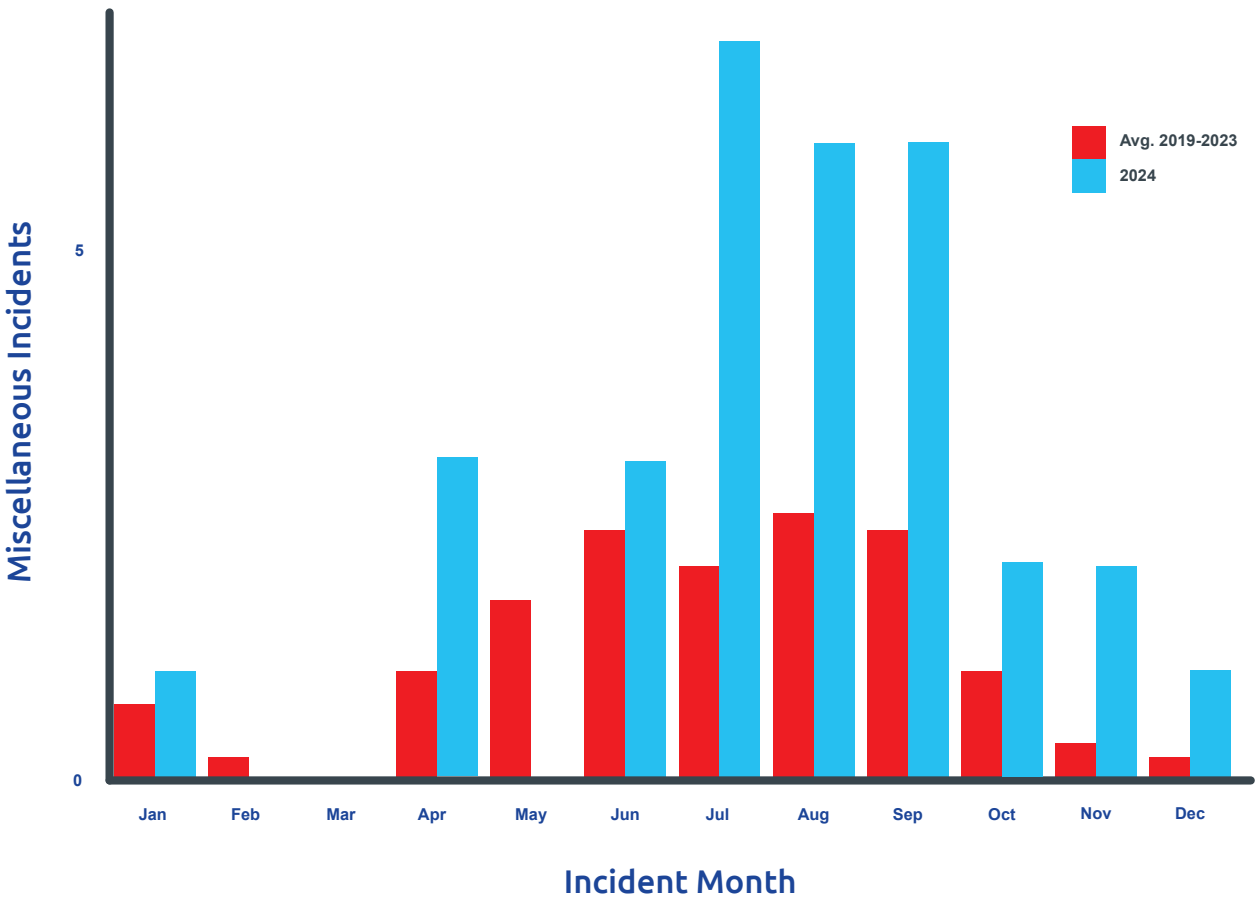


Figure 19
The month of occurrence of incidents for which there is not enough information to be able to attribute to another category or were false alerts with good intent.

January 2024 **24/254**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

April 2024 **24/255**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

April 2024 **24/279**

The Coastguard gave accident prevention advice to divers. (Coastguard report).

April 2024 **24/217**

After a five-hour drive, a large group of divers from several dive clubs arrived at a coastal site for the first of three days of diving. As they unloaded their equipment, the dive manager received a message from a member of one of the clubs participating in the trip reporting that the compressor that had filled the cylinders taken on the trip by members of his club had dangerously high levels of oil, posing a risk of contamination. It was recommended that all tanks were drained and the compressor professionally inspected. With half the tanks on the trip possibly contaminated, the dive manager considered whether the trip could go ahead safely. The dive manager assembled the most

experienced members of the group and deliberated on what to do, noting that the same compressor had been used only a week prior. The dive manager resolved to go ahead with the trip, but to monitor all divers throughout. After three days of diving, no one reported any illness before, during or after their dives.

June 2024 **24/256**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

June 2024 **24/287**

The Coastguard gave accident prevention advice to divers. (Coastguard report).

June 2024 **24/063**

A group of divers arrived at a beach for an afternoon's diving in good weather and calm conditions. As the group were preparing to dive, a large family group of adults and children arrived. All were acting boisterously, including shouting, swearing and throwing stones at each other. Shortly after, an older member of the group arrived in his car towing a small fishing boat. After launching the boat, the owner started ferrying members of the family group in and out of the bay, with some of the adults unravelling fishing lines at chest height across the beach. The divers were split into two waves and the first wave waded out, descended, and sometime later surfaced, and began swimming back to shore. The fishing boat continued its runs, passing close to the divers swimming back. Two RHIBs arrived from seaward and tied up to mooring buoys. The dive manager assigned more people to shore cover duties, stationing them at the top of the cliff overlooking the bay equipped with binoculars and walkie talkies, and advised the second wave to deploy DSMBs as soon as they descended. While divers were down, the fishing boat broke down but eventually started again. Shortly after the boat was witnessed by the dive manager reversing towards a swimmer in the water, only lifting the engine at the last minute to avoid contact with the swimmer's head. There were gasps of shock from beach users at what could have been catastrophic injury. The anti-social behaviour continued and the dive manager considered notifying the emergency services but decided that to do so would risk retaliation from the unruly group as it would have been obvious who had raised the complaint and so focussed on remaining vigilant over their divers. Eventually, the fishing boat was recovered from the water and provided further entertainment as the car first became stuck in wet sand, and then after it had been released, the boat almost bounced off the trailer as it hadn't been secured. The diver manager later debriefed the divers of the risks associated with other water users. He also phoned the Coastguard to report the dangerous and irresponsible boat activity and subsequently sent a report of the events, together with photographs of the boat.

July 2024 **24/260**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

July 2024 **24/259**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

July 2024 **24/257**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

July 2024 **24/295**

The Coastguard gave accident prevention advice to divers. (Coastguard report).

July 2024 **24/298**

The Coastguard gave accident prevention advice to divers. (Coastguard report).

July 2024 **24/258**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

July 2024 **24/065**

Two students and an examiner were taking part in an instructor exam. One student was leading the examiner on the dive, with the second student observing, when the observing student had a sneezing fit and became separated from the group. The remaining pair and the now separated diver each conducted a brief search for the other and then surfaced to be reunited. All were well.

August 2024 **24/262**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

August 2024 **24/263**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

August 2024 **24/264**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

August 2024 **24/304**

The Coastguard gave accident prevention advice to divers. (Coastguard report).

August 2024 **24/261**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

August 2024 **24/079**

A diver had completed a dive without incident. Whilst walking back to a kit bench to de□kit, the diver's cylinder allegedly caught and damaged the headlight of a car parked in a poorly maintained "yellow box" no parking area. The boxed no parking area is there as it is one of the main access and egress points used by divers to access the main dive site. The diver had no recollection of his cylinder making contact or damaging the car headlight. Apparently there was video footage of the diver's cylinder striking the car when he turned, but the diver had not seen the footage.

September 2024 **24/267**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

September 2024 **24/269**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

September 2024 **24/320**

The Coastguard gave accident prevention advice to divers. (Coastguard report).

September 2024 **24/266**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

September 2024 **24/265**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

September 2024 **24/268**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

October 2024 **24/270**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

October 2024 **24/271**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

November 2024 **24/272**

The Coastguard responded to a call which turned out to be a False Alert with Good Intent - FAGI. (Coastguard Report).

November 2024 **24/326**

The Coastguard gave accident prevention advice to divers. (Coastguard report).

December 2024 **24/330**

A request for assistance was received by the Coastguard to assist other authorities with a diving incident. (Coastguard Report).

Overseas Incidents

Fatality

March 2024 **24/016**

A diver was reported missing after failing to return after a dive. French authorities launched a large-scale search involving French navy, police, Coastguard and air rescue teams but the missing diver was not found. A week later, a fishing vessel spotted a body floating in the water. The fishing boat recovered the body, which was found to be wearing a wetsuit, weights and a diving knife, and subsequently transferred to a lifeboat for return to harbour where he was pronounced deceased. A post mortem examination found severe narrowing of the coronary arteries and signs of previous minor heart attacks. The medical examiner told an inquest the diver was at high risk of having a heart attack. (Media report only).

April 2024 **24/049**

A diver was on a diving holiday with 13 other divers and had completed a dive the day before to a maximum depth of 19m for a total duration of 50 min, including a safety stop at 6m for 3 min. He had chosen to sit out the afternoon dive as he was recovering from a cough and felt a little chesty so didn't want to push things. The next day, the divers planned to dive from the shore and follow a route recommended by the dive centre to a cave. Sea conditions were quite rough with a small swell and so six of the divers decided to miss the dive and act as shore cover. A briefing was given by two members who had done the same dive the previous year, supported by a pictograph from the dive centre showing the key navigation points. They included the advice that there could be a current experienced on the return leg and to surface if it was too difficult to swim against. Three buddy pairs entered the water to be led by the divers who had done the site previously, with the diver and his buddy making up the final pair in the group. The group descended to 5m and the leaders checked the effect of the current on their exhaust bubbles and agreed it was acceptable to continue. They led the descent to 10m and navigated to the cave entrance, where the group went inside and took photographs of the group with a club banner. On exiting, gas checks were made and a signal given to the buddy pairs to swim with the rocks on their right and each buddy pair could choose their own depth, although all followed the leaders as they descended to a depth of 18m. The group followed the return route until they were at 20m. As they rounded a rocky outcrop, they experienced an increased current but not as strong as it could have been, and whilst it required harder finning, they did not need to hold onto the rocks. Due to the increased effort, the leader ascended shallower to reduce gas consumption for everyone. As the group reached the next rocky outcrop, the current reduced but the diver and his buddy were no longer with the group. The last pair had surfaced and swum towards an exit ladder intended for swimmers and not divers. Surface conditions had deteriorated during the dive and the swell was increasing. The diver was seen by the shore party to start climbing the ladder but stopped half way. Meanwhile, the diver's buddy was being thrown against the cliff by the swell, and was unable to see the diver to help due to the swell and so he swan along the shoreline to try and get help. Members of the shore party made their way to the location to try and help. When they arrived they were unable to see the diver initially but then spotted him floating face down in the water. The shore party signalled to the lifeguards at the dive centre to alert them to the unresponsive diver. The leading pair of divers had surfaced by this time, close to the right exit point, and alerted to the situation, one of them started to make her way towards the diver but was overtaken by two lifeguards who were using jet powered scooters. The lifeguards reached the diver, turned him and started rescue breaths, then towed him using the scooters towards the dive centre boat, which was moored nearby. The diver was de-kitted and his equipment was left in the water for recovery later. He was then recovered into the boat and CPR started. The boat was brought to shore and CPR continued on land by members of the group. A defibrillator and oxygen set were brought and two other divers identified themselves as a doctor and a paramedic. The doctor managed the diver's airway and started oxygen-enriched rescue breaths. The doctor had an airway kit and was about to insert it but there was still a lot of water in the diver's airway and so he was rolled to allow it to drain and then the airway was inserted. CPR continued whilst the paramedic cut away the diver's wetsuit and applied the defibrillator pads and turned the unit on. The defib was in a foreign language but could be understood and a shock was not advised. CPR continued for around 30 min, with the diver's colour improving from purple to pink. An ambulance crew arrived and attached their own heart monitor machine whilst CPR continued. The ambulance crew then advised to stop CPR as there was a clear and consistent heartbeat, although there was no response from the diver. The ambulance crew then attached a ventilator and administered drugs. The diver was taken to hospital by ambulance and admitted to an Intensive Care Unit (ICU). The diver did not recover consciousness and passed away four days later.

April 2024 **24/015**

A diver died of a heart attack.

June 2024 **24/046**

Two divers were reported missing to the emergency services. The Coastguard tasked multiple services and a search located the divers, and after recovery from the water, one diver was declared deceased at the scene. The second diver was airlifted by helicopter to hospital where he received treatment for DCI. (EIRE).

July 2024 **24/054**

Two divers were diving from a charter vessel on a wreck at 60-65m, both using rebreathers with trimix diluent. One of the divers got into difficulties and the other went to assist him. Both made rapid ascents from the bottom direct to the surface, missing around an hour of decompression. They were recovered aboard the charter vessel and the emergency services were called and transferred both divers to hospital. One was declared deceased shortly after arrival and the other passed away during the night. (Media report only).

July 2024 **24/056**

A diver conducted a wreck dive to a maximum depth of 86m using a rebreather with trimix 10/55 as diluent. The diver was reported to be having difficulties at 11m on a decompression stop and refused assistance before going unconscious. The diver was spotted unconscious on the surface and recovered aboard a dive vessel and the emergency services alerted. The Coastguard tasked a rescue helicopter, which airlifted the diver to hospital where he was declared deceased. (Eire).

July 2024 **24/200**

A diver entered the water for a dive using a rebreather. On entering the water, the diver remained on the surface and was not responding. He was recovered from the water and was not breathing and the emergency services were called. The diver did not survive. (Eire).

DCI

March 2024 **24/184**

A diver suffered a DCI following a rapid ascent and received recompression treatment. (Eire).

April 2024 **24/027**

A diver had conducted two dives earlier in the day, the second of which was after a surface interval of 160 min after the first dive to a maximum depth of 34m with a total duration of 48 min, including a safety stop at 5m for 5 min. After a further surface interval of 30 min, they conducted a dive to a wreck at a maximum depth of 31m with a total duration of 44 min, including a safety stop at 5m for 7 min. All dives were completed without incident using nitrox 28. After the dive, the diver experienced tingling in his leg, arm, fingers and had stomach cramps. The diver was placed on oxygen and taken to hospital. The symptoms had gone by the time he reached the chamber but he was given a 3 hour treatment in the chamber. Doctors said there was a good chance it was a PFO. The diver had been using a computer with a Gradient factor 40/85.

July 2024 **24/197**

A diver suffered a suspected DCI and was treated in a recompression chamber. (Eire).

July 2024 **24/196**

A diver suffered a mask failure which resulted in DCI and was treated in a recompression chamber. (Eire).

September 2024 **24/093**

A diver had completed two dives the previous day, the first to a maximum depth of 11m for a total duration of 56 min, including a safety stop at 6m for 3 min and, after a surface interval of 185 min, a second dive to a maximum depth of 17m and a total dive time of 56 min, including a safety stop at 6m for 3 min. The next day after a surface interval of 17 hours and 14 min, the diver completed a dive to a wreck at a maximum depth of 24m for a total duration of 44 min, including a safety stop at 6m for 3 min. Once back aboard the boat, the diver was fine but back on land for a surface interval, she had a slight pain in the right side of her back and so lay down on warm ground for 5 min. On getting back up, she reported her right leg was numb with ‘pins and needles’ and so she went on oxygen for 30-45 min. The numbness and ‘pins and needles’ went and she decided not to dive again that day but went on the boat. When she returned to the dive centre around 150 min later, she found a slight rash on her back. She was placed on oxygen and contacted a hospital. She was advised to attend the hospital and given more oxygen and a saline drip whilst a consultation was arranged with a hyperbaric doctor. The diver was later discharged home.

September 2024 **24/091**

A diver had completed two dives on the first day of a diving holiday. At the end of the day, the diver noticed some bruising on her waist and hips where the weightbelt had been. It was very tight and she assumed this was the reason as she didn’t usually use a weightbelt. The bruising resolved overnight and the diver decided to dive again the next day and completed three dives. The first dive to a maximum depth of 24m for a total duration of 40 min, including a safety stop of 3 min and after a surface interval of 75 min a second dive to a maximum depth of 25m for a total duration of 45 min, including a safety stop of 3 min. After a further surface interval of 60 min, the diver completed a dive to a maximum depth of 20m for a total duration of 37 min, including and safety stop of 3 min. After the third dive, the diver noticed the same issue with bruising on her waist and hips. During the night, the bruising spread to her torso and became blotchy and red. She realised this was

DCI early the next morning and took a taxi to hospital, by this time feeling very fatigued and swelling in her thigh and arm muscles, which were also sensitive to touch. By the time she reached the hospital, she was also feeling dizzy. She asked to see a dive doctor and was placed on oxygen whilst she was waiting. After consultation with a dive doctor, she was admitted to a ward and kept on oxygen until she could be treated in the chamber later that night. She was given a 5 hours treatment and received a second 2.5 hours treatment the next day with full resolution of symptoms. She was discharged but was unable to fly home for 3 days. The diver was advised to have a test for a PFO as a potential cause of the DCI, or alternatively it could have been due to dehydration.

September 2024 **24/088**

A diver had completed a first dive to a maximum depth of 31m for a total duration of 44 min, and after a surface interval of 90 min, a second dive to a maximum depth of 29m for a total dive time of 54 min. On returning to shore, about 30 min after surfacing, the diver reported tingling in three fingers of his left hand. The return to the dive base took another 15 min, during which the symptoms had not changed The diver was placed on oxygen and a diver support line contacted. The diver was advised to continue on oxygen therapy for one hour and drink a lot of fluids, and then call the advice line again to be re-assessed. Symptoms had largely been resolved and the doctor considered the oxygen and fluids had been sufficient and no further treatment necessary. The doctor considered that DCI had been due to dehydration, short surface interval and over-exertion getting out of water, by ladder, fully kitted into a RHIB in a moderate sea.

October 2024 **24/110**

A diver had completed three days of diving, with two dives per day and three of the dives involved required decompression stops. Approximately two hours after the last dive, the diver experienced a burning and itching sensation in her right shoulder, which she thought might be an insect bite, although there was no discolouration. The next day, the diver conducted a single dive to a maximum depth of 30m and a total duration of 53 min. Two hours after surfacing, the diver noticed itching to the right side of her chest with a dull ache and pain migrating to her armpit. The diver was concerned this might be due to diving and so called a chamber in the UK for advice and did not dive for the remainder of the trip. Her symptoms did not deteriorate and she returned home a few days later. The diver attended the chamber for a fitness to dive medical and received a recompression treatment as a precaution.

October 2024 **24/208**

A diver suffered a suspected DCI and was treated in a recompression chamber. (Eire).

Boat/Surface

April 2024 **24/141**

A dive boat suffered engine failure and was assisted back to shore. After returning to port the fault was found to be due to a severed fuel pipe allowing air into the fuel system.

May 2024 **24/160**

A dive boat suffered engine failure and was towed back to base by a second boat.

May 2024 **24/190**

Divers assisted to stop a runaway boat. (Eire).

July 2024 **24/199**

A dive boat hit a pillar. (Eire).

August 2024 **24/069**

A lifeboat was launched during a lifeboat open day to respond to a RHIB, with 13 divers aboard, that had experienced a mechanical breakdown, whilst at a wreck site. The vessel was unable to manoeuvre due to damage and was taken under tow back to harbour. (Media report only). (Eire).

September 2024 **24/086**

A group of divers were on a liveaboard diving holiday. Part way through the trip, three of the divers were diving together on a plateau on an offshore island. As they reached the turn point of the dive where a current was anticipated, one of the trio was caught by an unexpected cross current, which caused him to ascend before rapidly descending again to try to rejoin his buddies. The diver experienced acute pain in his left ear which would not clear until he had descended back to his starting depth. The ear then suddenly cleared, causing further pain and severe disorientation, and he felt he was leaning at a 45 degree angle despite struggling to remain upright. The disorientation continued for a few min and the diver signalled his distress to his buddies, whilst the remainder of the group moved out of sight. The diver assessed that he needed to surface and signalled to his buddies to deploy a DSMB. The first attempt at deployment jammed the reel and it was discarded before a second DSMB was deployed successfully. As they started to ascend with the diver still unbalanced, the group were approached by an oceanic whitetip shark which began circling them. The group decided to ascend to the surface, and on surfacing, found large surface waves. The shark had ascended and continued circling the divers, who fended it off with an extendable camera pole and the end of a fin. Following the advice in a safety video on sharks, the trio huddled together upright in the water and opted to remain still as the current seemed to be too strong to swim against and risked escalating the behaviour of the shark. Between wave surges, it was possible to still see the island and

moored dive boats, but the current was drifting the divers away to the south. A third DSMB was inflated to aid location but it became clear that the wave height was much greater than the DSMBs, and no search vessels could be seen. The shark continued to circle for around 20 min before swimming away. The divers continued to drift for a number of hours and all began to suffer the effects of sunburn, dehydration, exposure and friction injuries from finning efforts. Although the island remained visible for a few more hours, the divers were becoming increasingly distressed despite efforts to reassure each other. By mid afternoon, the group spotted a helicopter in the distance but it was too far away to be able to signal it. The current was felt to ease and so the divers made an effort to swim towards the distant island to remain in the general area. The group hoped that as night fell, they would be able to use dive torches to signal their location. The diver with the camera pole attached a torch to the end and used it to start to signal towards the island as dusk fell and continued after nightfall. Eventually, the group spotted lights from a boat nearer to them to the south and they signalled frantically with all their remaining energy. The vessel came close but the divers were too exhausted to swim to it. A small tender was launched to recover the divers from the water and transfer them to the boat, which turned out to be a navy vessel. The divers had been in the water for almost 12 hours and were treated by a navy doctor for dehydration, severe sunburn, exhaustion, sores and friction injuries and potential IPO. The divers were returned to shore and admitted to hospital for checks before being discharged and returned to the liveaboard boat and reunited with their group.

Ascents

April 2024 **24/130**

During a dive to a maximum depth of 17m a diver experienced an uncontrolled ascent direct to the surface omitting a safety stop. The diver was assessed and although they displayed no symptoms they were put on oxygen as a precaution. The diver's buddy had attempted to slow the diver's ascent by holding onto them, but both surfaced faster than normal. The buddy was not assessed or put on oxygen.

April 2024 **24/142**

A diver had completed a training dive to a maximum depth of 15m and as they ascended to 6m they lost control of their buoyancy and ascended direct to the surface, omitting a safety stop.

May 2024 **24/187**

A diver made a rapid ascent and was given oxygen as a precaution. (Eire).

May 2024 **24/191**

A diver made a rapid ascent and was given oxygen as a precaution. (Eire).

May 2024 **24/192**

A diver made a rapid ascent and was given oxygen as a precaution. (Eire).

June 2024 **24/194**

A diver made a rapid ascent and was given oxygen as a precaution. (Eire)

July 2024 **24/051**

A diver was on a group holiday and had conducted two previous days of diving without incident. On day three, the diver had a first dive to a maximum depth of 16m for a total duration of 51 min, followed by a surface interval of 80 min. For the second dive, she was buddied with an inexperienced diver who was using new camera equipment. The inexperienced diver had previously been diving with another inexperienced diver but had been concentrating on his new camera and paying less attention to his buddy. During the dive, the buddy was enjoying using his camera whilst the diver monitored his gas consumption, reminding the buddy to check as well as he was using a lot of gas whilst distracted with his camera. The diver had also carried some extra weights in her BCD in case they were needed, which meant she had excess gas in her BCD. As her buddy approached some rocks to film fish, the diver inflated her BCD slightly to rise above and over the buddy but then accidentally pressed her inflate button again instead of the deflate control. She immediately dumped gas from her BCD through the shoulder dump and corrugated hose but was not quick enough to stop her ascent direct to the surface, with her computer indicating 1 min to ascend from 16m. The diver decided to remain on the surface and signalled the group below. The guide for the group partially ascended to check she was OK, and on receiving an affirmative response, returned to the group to lead them back to the boat. The diver inflated her DSMB so the skipper could note her location and then swam towards the anchored boat, watching and following the group below. The surface swim took 20 min and the diver was tired when she reached the boat, and taking account of the rapid ascent, requested and was provided oxygen. The diver continued to breathe oxygen during the return to harbour until the supply was exhausted after an hour. As a precaution, the diver attended a local hyperbaric chamber where a doctor carried out a neurological assessment, and advised that no treatment was necessary and the diver should continue to monitor for any symptoms arising, take it easy and not to dive for the rest of the holiday but was clear to fly home three days later.

July 2024 **24/195**

A diver made a rapid ascent and was given oxygen as a precaution. (Eire).

September 2024 **24/203**

A diver made a rapid ascent and was given oxygen as a precaution. (Eire).

September 2024 **24/204**

A diver made a rapid ascent and was given oxygen as a precaution. (Eire).

November 2024 **24/172**

During a dive and at their maximum depth of 18m, two divers conducted a fast ascent before regaining control at 7m. The pair aborted the dive and completed a safety stop. Once back ashore, they were placed on oxygen as a precaution and medical advice was sought.

November 2024 **24/174**

Following a dive to a maximum depth of 29m, a diver deployed a DSMB at a depth of 16m when it snagged. The diver did not release the reel and was dragged up direct to the surface in an uncontrolled ascent.

Technique

March 2024 **24/122**

Three divers had conducted a dive to a maximum depth of 20m. Towards the end of the dive at a depth of 8m one of the divers became separated from the other two. All divers were reunited on the surface after a total dive time of 45 min.

April 2024 **24/023**

A diver had completed an earlier dive in the day to a maximum depth of 16m and a total duration of 50 min, surfacing at 8.00am. After a surface interval of 165 min, he was joined by a buddy who was on a first dive for the day as part of a group of six being led by a dive guide on a wreck. The diver was using independent twin 12 ltr cylinders whilst his buddy had a single 12 ltr cylinder, both using nitrox 32. Having toured the wreck and reached a maximum depth of 30m, they returned to the shotline. The pair prepared to ascend as the buddy was down to 100 bar, however the dive guide led the group to another, smaller wreck approximately 50m away. This had not been briefed and the wreck was in the range of 28-30m. As they started to return from the wreck, the diver indicated to the guide that his buddy was getting low on gas. On returning to the main shotline, the pair aborted the dive and began ascending the shotline. At around 15m in mid-water in a slight current, the buddy was down to 20 bar and the diver provided an AS and the pair swam side by side back to the surface. They both struggled a little with buoyancy control and surfaced at the stern of the dive boat. The ascent from 15m had taken just less than a minute and they had omitted a safety stop and total dive duration was 35 min. On returning aboard the boat, both divers were sat down and given nitrox 34 to breathe whilst wearing their masks for 12 min. The divers were monitored for the next 2-3 hours but suffered no ill effects.

May 2024 **24/188**

A diver became entangled at depth during a dive but suffered no ill effects. (Eire).

July 2024 **24/102**

A diver conducted a dive from a boat to a maximum depth of 15m, starting the dive with 230 bar. As the diver reached his maximum depth, his contents recorded 100 bar and he moved shallower with the group. At 9m, he had 50 bar remaining. He signalled another diver not in their group that he had 50 bar left and she signalled the group, but they ignored her. Shortly after, the diver ran out of gas and the other diver provided her AS and the pair ascended safely, with the diver surfacing after a total dive time of 35 min.

October 2024 **24/100**

A group of divers were entering the water for a wreck dive from a RHIB using a backward roll. As each diver had surfaced the OK signal was given, but one diver in the group failed to give the correct signal and appeared to be swimming away from the group of divers. Two other divers noticed the abnormal behaviour and swam over to the diver. The diver by this time, was unable to maintain buoyancy in the water and was finning hard to maintain himself at the surface. One diver provided buoyancy to the casualty using their own fully inflated BCD while the other immediately turned on the casualty's diving cylinder whilst simultaneously inflating the diver's BCD. Once positive buoyancy had been achieved, the casualty was immediately towed back to the RHIB. The cox'n was ready to recover the casualty back into the RHIB but he refused, and spent a few min regaining his composure. He then advised he was able to progress with the planned dive to 20m, advising he had asked his buddy to confirm his air was turned on before commencing the dive. It was only after entering the water, he realised that his cylinder was either not turned on or was insufficiently turned on to provide the required air supply to his BCD and demand valve. The dive then progressed shortly afterwards without further incident. Post dive, a full debrief was undertaken emphasising the importance of buddy checks, (BAR) with all members of the diving party so lessons could be learnt.

November 2024 **24/173**

During a shore dive to a maximum depth of 23m, a diver ran out of gas at 15m. After following an out of gas protocol, the ascent was conducted by a horizontal swim and ascent up the slope they exited safely after a total dive time of 39 min.

Equipment

January 2024 **24/121**

Following a dive to a maximum depth of 35m for a total duration of 45 min a dive computer was found to be reading over depth on return to surface. The computer was isolated and returned to the store for review and repair.

March 2024 **24/123**

Having assembled their kit prior to diving a diver turned on the cylinder to check when the HP Hose ruptured. The diver had been holding the contents gauge and so no injury occurred. The hose was replaced and an equipment function check conducted.

March 2024 **24/124**

Following a dive to a maximum depth of 20 a diver deployed their DSMB from a depth of 7m but became entangled in the line and surfaced with a total dive time of 45 min. The diver suffered no ill effects.

March 2024 **24/125**

On assembling and checking the kit a diver found that the needle was sticking on their contents gauge and consequently reading high. The gauge was replaced and further checks made prior to diving.

March 2024 **24/127**

During a dive to a maximum depth of 25m a pair of divers had deployed a DSMB. As they ascended to a depth of 20m the DSMB line became snagged on a swimming area surface line. The divers surfaced with a total dive time of 40 min and disentangled the line before swimming ashore on the surface.

March 2024 **24/013**

Two students were diving with an instructor using cylinders from a dive centre filled with nitrox 27. At a depth of 9m, one of the students indicated to the instructor that the cylinder of the other student was releasing unusual bubbles. On investigation, the instructor found that the bubbles were issuing from the join between the cylinder and the valve. The instructor donated his AS to the student and then isolated the cylinder. A precautionary AS ascent was performed followed by recovery onto the boat. The cylinder was quarantined by the dive centre.

April 2024 **24/131**

During a dive to a maximum depth of 20m a diver noticed at 3m that one of their dive computers had switched off during dive. The diver surfaced after a total dive time of 34 min.

April 2024 **24/132**

Following a dive to a maximum depth of 20m for a total duration of 40 min a diver discovered that one of their computers had not recorded the dive. The computer was removed from use.

April 2024 **24/133**

During a dive to a maximum depth of 20m a diver noticed a low pressure hose was leaking. After surfacing without incident with a total dive time of 40 min the hose was replaced and removed from service.

April 2024 **24/134**

During a dive to a maximum depth of 20m a diver noticed a low pressure hose was leaking at the inflator connection. After surfacing without incident with a total dive time of 40 min the hose was replaced and removed from service.

April 2024 **24/135**

Whilst preparing their equipment for a dive a diver turned on their cylinder and the regulator 2nd stage detached from the hose. Whilst trying to turn the cylinder off again the free hose struck the diver in the face but without injury. During turning the cylinder on the diver had been holding the contents gauge and high pressure hose.

April 2024 **24/136**

During a dive to a maximum depth of 11m a diver noticed a low pressure hose was leaking at the inflator connection. After surfacing without incident with a total dive time of 40 min the hose was replaced and removed from service.

April 2024 **24/137**

A diver had conducted a dive to a maximum depth of 21m and as they returned to 6m during their ascent they noticed that one of their computers displayed an error code. The dive was completed using their second computer with a total dive time of 32 min. The computer was removed from service.

April 2024 **24/148**

During a dive to a maximum depth of 25m, a diver surfaced after a total dive time of 43 min to discover they had lost their dive knife. It was noted that the knife did not have a retaining lanyard fitted.

April 2024 **24/138**

During a night dive to a maximum depth of 7m a diver lost a fin and was unable to locate it. The diver and buddy surfaced without further incident with a total dive time of 30 min.

April 2024 **24/149**

During a dive to a maximum depth of 25m, a diver surfaced after a total dive time of 35 min to discover they had lost their dive knife. It was noted that the knife did not have a retaining lanyard fitted.

April 2024 **24/150**

During a dive to a maximum depth of 8m, a diver surfaced after a total dive time of 25 min to discover they had lost their dive knife. It was noted that the knife did not have a retaining lanyard fitted.

April 2024 **24/139**

A diver had conducted a dive to a maximum depth of 25m and as they returned to 7m during their ascent they noticed that one of their computers displayed an error code. The dive was completed using their second computer with a total dive time of 37 min. The computer was removed from service.

April 2024 **24/140**

A diver had conducted a dive to a maximum depth of 30m and as they returned to 6m during their ascent they noticed that one of their computers displayed an error code. The dive was completed using their second computer with a total dive time of 44 min. The computer was removed from service.

April 2024 **24/154**

Whilst preparing for a dive, a dive torch exploded but no other damage or injury occurred. All torches of the same type were isolated, and removed from service.

April 2024 **24/143**

During a training dive to a maximum depth of 15m a diver deployed a DSMB from 8m when the line snagged, jamming in the mechanism. The diver released the snagged DSMB and ascended with their buddy under a second DSMB.

April 2024 **24/152**

Whilst preparing their equipment for a dive, the BCD cam strap failed and the dive was aborted.

May 2024 **24/186**

A diver identified a bad fill and did not use the cylinder. (Eire).

May 2024 **24/159**

During travel to a dive site in a boat, the lens fell out of the diver's mask. The diver used a spare mask to complete the dive and the damaged mask was replaced.

May 2024 **24/146**

A student on a training course completed a training dive to a maximum depth of 14m with a total duration of 35 min. On returning to shore, one of their computers was found to be flooded.

August 2024 **24/201**

A low pressure hose ruptured underwater but the diver was able to surface without any ill effects. (Eire).

September 2024 **24/206**

A high pressure hose ruptured underwater but the diver was able to surface without any ill effects. (Eire).

October 2024 **24/168**

During a handover between expedition personnel, several pieces of pool equipment were found to have failed, been damaged or were inoperable.

November 2024 **24/175**

Gas supplied from a compressor failed a gas purity test on moisture. Remedial work by the dive centre resolved the situation.

November 2024 **24/176**

During a dive, a diver noticed that their contents gauge had flooded. The dive was aborted and equipment removed from service and returned to stores for rectification.

Injury

January 2024 **24/119**

A diver experienced ear pain on descent and aborted the dive. The diver sought medical attention for a suspected perforated ear drum.

January 2024 **24/120**

A diver was unable to equalise on descent and on surfacing his ear subsequently felt blocked and his hearing was affected. He sought medical advice and medication was administered and the ear issue resolved. No injury sustained.

February 2024 **24/006**

During a whale watching and snorkelling trip, a female participant was recovered back onto the boat and appeared to be unconscious and not breathing. The female was brought aboard the boat by the guides and 2 other passengers started CPR. The group had only been in the water for about 5 min, having only been onsite for about 15 min. All had entered the water quietly from the boat and had swum towards the lead guide, who was spotting the whales underwater. There was a metre swell with chop that had made it difficult to keep an eye on where the guide was and keep the group together, and so the group were instructed to return to the boat. A qualified scuba diver had been part of the group, and as he climbed aboard, he witnessed two people commence CPR, but they only provided a few compressions as there were signs of life with the unconscious woman. The two guests continued with their assessment of the situation, and placed the casualty in the recovery position whilst the dive guides assembled the oxygen equipment. The casualty was placed on oxygen and covered in spare wetsuits and towels to keep her warm. The boat returned back to harbour and the casualty was taken off the boat by firefighters and taken away in an ambulance.

February 2024 **24/008**

A diver was preparing to enter the water for a dive when going down a set of steps on the dive boat to enter the water, his fins slipped and he fell, landing on his right shoulder, causing pain in the joint. The diver was unable to get up without pain and told the dive guide to continue the dive without him as the rest of the group were already in the water. With the assistance of the skipper, the diver got out of his equipment and got back onto the main deck. The shoulder was painful if he moved his arm in certain directions. The pain eased whilst the rest of the group continued with the dive and he was able to get more movement back in the shoulder. The diver missed the subsequent dive but he felt okay for the 3rd dive after lunch. The injury is similar to one he had experienced a couple of years previously whilst trying snowboarding. The diver was further hurt because on the dive he missed, his buddy saw the schooling hammerheads.

March 2024 **24/128**

A diver was boarding a dive boat when they strained a tendon in their leg. First aid was administered.

March 2024 **24/129**

A diver was helping their buddy to kit up when they strained their back lifting diving kit for their buddy.

April 2024 **24/144**

A diver was removing their wetsuit boot when it resulted in ripping their toenail off.

April 2024 **24/145**

Whilst preparing for a night dive, a diver activated a glow stick when it snapped, splashing the chemical fluid in their eye. The eye was rinsed with fresh water and first aid treatment administered.

April 2024 **24/185**

A trainee on an open water training dive suffered from an ear barotrauma and received first aid treatment. (Eire).

May 2024 **24/030**

A diver and her two buddies entered the water from the shore. During the descent, the diver had problems with her mask flooding. Whilst she struggled to resolve the mask problem, the diver was not adjusting her buoyancy and started to panic. One of her buddies carried out a controlled buoyant lift and ascended to the surface at a normal rate, with the diver remaining conscious and breathing throughout. The divers signalled OK to the shore and began to fin back to shore, with the third diver following. The diver was struggling to swim in a straight line and so her buddy towed her back to shore. As they approached, the shore party entered the water to assist with the diver as the swell created surface conditions making entry and exit to the water more challenging. Once helped out of the water the diver was fully conscious and responsive and was able to walk normally back to the car park. Her equipment was recovered by the shore party and the diver remained in a mild shocked state for a short time but was back to normal after an hour. The diver reported no adverse symptoms over the next 24 hours. (Eire).

May 2024 **24/189**

A diver slipped whilst in diving equipment injuring themself but did not require medical attention. (Eire).

May 2024 **24/147**

During a training dive to a maximum depth of 15m, a student suffered from sinus pain leading to sickness. Total dive time was 32 min. After surfacing, the diver was administered oxygen and medical advice sought. The diver was suspended from diving for 48 hours.

August 2024 **24/077**

A student had completed two previous dives a month apart without any problems. He conducted a third training dive a month later to a maximum depth of 5m and conducted a variety of skills, including two AS ascents. After the second ascent, the student reported he had heard a pop in his left ear on the surface. Both divers then conducted a surface swim to the shore some 200m away. On exiting the water, the student, whilst not experiencing any pain, reported muffled hearing in his left ear. Arrangements were made to refer the student to a medical centre where he was seen three days later and diagnosed with a slight perforation.

August 2024 **24/161**

A diver slipped and fell on rocks whilst exiting the water following a dive to a maximum depth of 8m for a total duration of 36 min. The diver suffered a cut to their hand.

August 2024 **24/202**

A diver slipped whilst wearing scuba equipment and was hospitalised. (Eire)

September 2024 **24/205**

A diver slipped whilst wearing scuba equipment and was hospitalised. (Eire)

October 2024 **24/099**

Divers were preparing to dive where the entry to the dive site required divers to walk down a series of stairs and walk across the natural rock platform to enter the water. Whilst crossing the rock platform, a diver slipped which resulted in him falling awkwardly on his right leg, causing an injury to his right knee. Once it was established that the diver had sustained an injury and would not be able to safely walk or support his weight on his injured right knee, he was carefully moved away from the water's edge and an ambulance was called to assist. Emergency services then extracted the diver and transported him to hospital for treatment.

October 2024 **24/207**

A diver suffered from an ear barotrauma and received first aid treatment. (Eire).

Miscellaneous

March 2024 **24/126**

A diver was boarding a dive boat when they fell overboard. No ill effects were experienced.

April 2024 **24/151**

A crew member leaning over the side of a dive boat to attach a mooring was splashed by a wave onto their lifejacket which triggered the self-inflation mechanism. The life jacket functioned as designed and was replaced on return to shore.

June 2024 **24/193**

A boat trailer lost a wheel whilst being towed. (Eire).

July 2024 **24/198**

A dive boat fell off the trailer whilst launching. (Eire).

October 2024 **24/095**

A group of divers were diving in an area known for oceanic whitetip sharks and had received a full briefing and safety guidance provided by the dive guides. Towards the end of the dive, a diver had completed his deco stops when he noticed that one of the other divers was on the surface with a shark which was starting to take an interest in her. The guide stayed at 10m and was signalling her to descend but she was unable due to a buoyant aluminium cylinder. The diver swam under her after making sure his buddy was waiting at the dive boat to leave the water. The diver continued to breathe out under the diver on the surface to discourage the shark. The shark eventually turned its attention towards the diver. As instructed in the briefing, the diver kept his eye on the shark and remained at 5m. The shark came close and he kept his camera rig between himself and the shark. At one point, the shark nosed the camera lens then looked towards the diver's feet so he lifted his fins. Eventually the shark swam off and the diver was then able to swim up to the diver on the surface and pull her down to 5m. The pair swam the 30m back to the boat safely with no further incident.

History of Previous UK Diving Fatalities

Year	Membership	BSAC	Non-BSAC	Year	Membership	BSAC	Non-BSAC
1965	6,813	3	-	1997	48,412	4	12
1966	7,979	1	4	1998	46,712	5	14
1967	8,350	1	6	1999	46,682	9	8
1968	9,241	2	1	2000	41,692	7	10
1969	11,299	2	8	2001	41,272	10	14
1970	13,721	4	4	2002	39,960	3	7
1971	14,898	0	4	2003	38,340	6	9
1972	17,041	10	31	2004	37,153	4	18
1973	19,332	9	20	2005	37,185	5	11
1974	22,150	3	11	2006	35,422	4	11
1975	23,204	2	-	2007	34,857	8	5
1976	25,310	4	-	2008	34,325	6	5
1977	25,342	3	-	2009	32,790	8	9
1978	27,510	8	4	2010	32,229	7	7
1979	30,579	5	8	2011	30,909	5	7
1980	24,900	6	7	2012	29,632	9	7
1981	27,834	5	7	2013	28,728	5	9
1982	29,590	6	3	2014	28,375	5	11
1983	32,177	7	2	2015	27,803	3	5
1984	32,950	8	5	2016	27,346	5	7
1985	34,861	8	6	2017	26,774	2	13
1986	34,210	6	9	2018	26,717	8	9
1987	34,500	6	2	2019	27,000	10	3
1988	32,960	10	6	2020	21,594	2	4
1989	34,422	4	8	2021	22,047	8	8
1990	36,434	3	6	2022	22,540	0	6
1991	43,475	8	9	2023	23,447	4	5
1992	45,626	9	8	2024	22,153	3	9
1993	50,722	3	6				
1994	50,505	6	6				
1995	52,364	9	9				
1996	48,920	7	9				

*1999 figure corrected from 9 to 8 due to a double count discovered in 2010.
1998 figures onwards are calendar year figures; 1965 to 1998 are October 1st to September 30th figures.

Abbreviations used in this and previous incident reports

AIS	Automatic identification system (location beacon)
AS	Alternative source (gas or air)
A&E	Accident and emergency department
AED	Automated external defibrillator
ARCC(K)	Aeronautical rescue coordination centre (Kinloss)
ARI	Aberdeen Royal Infirmary (Scotland, UK)
AWLB	All weather lifeboat
BCD	Buoyancy compensation device
BOV	Bailout valve
CAGE	Cerebral arterial gas embolism
CG	Coastguard
CCR	Closed circuit rebreather
CNS	Central nervous system
CPR	Cardiopulmonary resuscitation
CRT	Coastguard rescue team
DCI	Decompression illness
DDMO	Duty diving medical officer
DDRC	Diving Diseases Research Centre (Plymouth, UK)
DSC	Digital selective calling (emergency radio signal)
DSMB	Delayed surface marker buoy
DPV	Diver propulsion vehicle
ECG	Electrocardiogram
ENT	Ear, nose and throat
EPIRB	Emergency position indicating radio beacon
FAWGI	False alarm with good intent
FRS	Fire and rescue service
GP	General Practitioner (doctor)
GPS	Global positioning system
Helo	Helicopter
HEMS	Helicopter emergency medical service
HLS	Helicopter landing site
HSE	Health and Safety Executive
HUD	Head up display
ILB	Inshore lifeboat
INM	Institute of Naval Medicine
IPO	Immersion pulmonary oedema
IV	Intravenous
kg	Kilogramme
LB	Lifeboat
MCA	Maritime & Coastguard Agency
m	Metre
min	Minute(s)
MOD	Maximum operating depth
MOP	Member of the public
MRCC	Maritime rescue coordination centre
MRSC	Maritime rescue sub centre
MV	Motor vessel
NCI	National Coastwatch Institute
PFO	Patent foramen ovale
PLB	Personal locator beacon
POB	Persons on board
QAH	Queen Alexandra Hospital (Portsmouth, UK)
QAB	Queen Anne Battery (Plymouth, UK)
RAF	Royal Air Force
RHIB	Rigid hull inflatable boat
RMB	Royal Marines base
RN	Royal Navy
RNLI	Royal National Lifeboat Institution
ROV	Remotely operated vehicle
SAR	Search and rescue
SARIS/SARSYS	Search and rescue information system
SMB	Surface marker buoy
SRR	Search and rescue region
SRU	Search and rescue unit
UK SDMC	UK Sports Diving Medical Committee
UTC	Coordinated universal time
VLB	Volunteer life brigade
999	UK emergency phone number

BSAC
Dive with us