

Diving Fatalities of Czech and Slovak Divers (1965-2025) Smrtelné nehody českých a slovenských potápěčů (1965-2025)

Jiří Hovorka¹, Ondřej Belica² 

¹ Divers Association of the Czech Republic; hovorka_jiri324@centrum.cz

² CRAA – Institute of Occupational Safety at Heights; obelica@lezectvi.cz |

Type of Paper

Original Research.

Keywords

Accident, diver,
diving fatality,
scuba diving..

Typ článku

Původní práce

Klíčová slova

Potápění, potápěč,
nehoda, úmrtí.

This is an Open Access
article under the CC BY
license



Abstract

The article deals with 185 diving fatalities involving Czech and Slovak divers that have occurred in the last 60 years in their countries and abroad. It provides a basic overview of accidents and groups them according to the most common causes, which are buddy team separation or solo diving, health conditions, overhead environment, inappropriate equipment and freediving.

Abstrakt

Článek se zabývá 185 fatálními potápěčskými nehodami českých a slovenských potápěčů, k nimž došlo za posledních 60 let u nás i v zahraničí. Přináší jejich základní přehled a seskupuje je podle nejčastějších příčin, jimiž jsou rozdělení buddy týmu či sólo ponor, zdravotní indispozice, ponory v prostředí bez volné hladiny, neodpovídající výstroj a nádechové potápění.

Note: This is an English translation of a Czech paper. Please cite the original paper as a source:

<https://swarm.craa.cz/smrtelne-nehody-ceskych-a-slovenskych-potapecu-1965-2025>

INTRODUCTION

Although the Czech Republic and Slovakia are landlocked countries without direct access to the sea, for many of their inhabitants, across generations, diving is a popular sport or hobby. Many of them actively dive all year round, others only occasionally recreationally during summer holidays. They engage in freediving, snorkeling, and last but not least, scuba diving. In addition, in connection with waterworks and dams and their maintenance, dozens of divers perform commercial diving as their profession (with

breathing medium supplied from the surface). Members of the law enforcement units engage in diving in connection with the performance of their official duties.

Until 1989, Czechoslovak divers (with some exceptions) mainly dived in the former Czechoslovakia, especially in lakes, flooded quarries, dams, rivers or caves. Only after the revolution were they able to start diving, not only in the Baltic or the Adriatic, but also in the (sub)tropics or beyond the Arctic Circle. Nevertheless, Czech and Slovak diving sites are still very popular with many divers and are even visited by divers from neighboring countries.

However, the movement of a person under the water surface is a stay in a non-breathable environment and all the breathing medium necessary for survival

must be carried with them, or must be supplied to them from the surface. Loss of body heat through convection and higher ambient pressure place significant demands on the human organism. The diver is thus exposed to an increased risk of life or health threats. Insufficient training, poor health (or deterioration of the current health condition), human error, loss of breathing medium, equipment failure, entanglement in obstacles and many other factors can easily become the cause of an accident. This often ends in the death of the diver.

1 MATERIALS AND METHODS

The article deals exclusively with fatal accidents of Czech and Slovak divers (including snorkelers and freedivers), which occurred both in the Czech Republic and Slovakia (or Czechoslovakia) and abroad. It does not include accidents of foreign divers that occurred in the Czech Republic, Slovakia or Czechoslovakia, although such fatal accidents also occur [1]. It also does not mention deaths during desperate attempts to escape behind the Iron Curtain during the totalitarian period, which were attempted underwater by, for example, J. Škop or B. Bartoněk [2, p. 100] and other unfortunate individuals. It does not deal with diving accidents, which are serious, but fortunately do not end in the death of the diver [3].

When evaluating fatal diving accidents of our divers, I base my assessment on a database that I have maintained since 1965. The record is certainly not complete, especially in recent years, but certain dependencies can be identified from 185 cases. My statistics are supplemented by some foreign papers.

All relevant data on demographics, health, experience and circumstances of the dive were extracted from the available information in the database (although conclusions can only be approximate, as the input data may not be complete and there is not much of it). Possible causes of accidents, external factors, limiting circumstances and the moment when the accident occurred (whether during the dive or after it was completed) were also analyzed. Attention was also paid to the way in which the injured diver returned to the surface.

For the purposes of comparison by gender, age, causes and times of accidents, accidents were grouped and averages (including standard deviations) and medians were calculated.

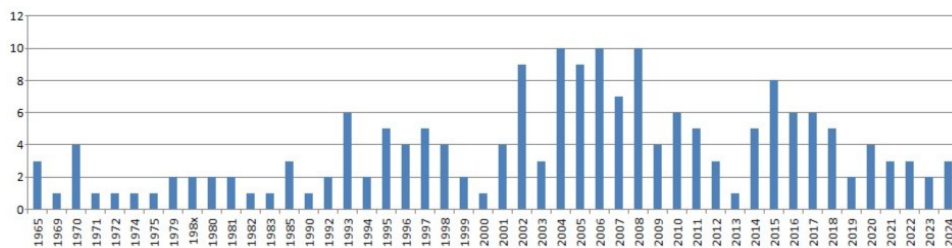


Figure 1: Development of accident rates among Czech and Slovak divers

The limiting factors were the input data, as there is no available central registry of diving accidents in the Czech Republic or Slovakia (nor a unified way of keeping records or categorizing¹ them, as is customary elsewhere [4, p. 223]). It is therefore possible that some diving accidents are not included in the database at all, as the source of the database data is information obtained within the diving community or available from the media. In

¹ Predisposing factors (relevant factors preceding the dive and/or underwater emergencies), triggers (what turned the dive into an emergency), disabling agents (activities or circumstances associated with the trigger that caused the injury or illness), disabling conditions (condition that led directly to death or incapacitated the diver in such a way that he drowned), and cause of death (as stated in the autopsy report)[4, p. 223].

some cases, there is no detailed information about the accident, about the persons involved (including the deceased), about the course and more detailed circumstances of the accident.

2 RESULTS

In the years 1965-2025 (until mid-2025), 185 fatal diving accidents of Czech and Slovak divers were recorded. 21 of these accidents occurred in Czechoslovakia, 55 accidents occurred in the Czech Republic and 12 accidents occurred in Slovakia. The remaining 97 accidents occurred abroad (41 - HR; 12 - EG; 9 - AT; 6 - F; 5 - I; 3 - DDR - 3, GR, ID; 2 - MV, PH, USA; 1 - CO, CY, DE, JO, NO, PL, PT, TH and YU).

In the Czech Republic, the most accidents occurred in Svobodné Heřmanice (13), Barbora (7), Orlík (5), Dalešice (3) and Slapy and Miličín (in both cases 2 accidents). 10 accidents occurred in Czechoslovak caves (cave 13C, Amatérská cave, Hranická abyss, Lopač, Teplica, Slobody cave, Morské oko - Tornala, Zlatá díra) and 3 in mines (Čermná, Chrustenická drift). Two deaths occurred in swimming pools.

2.1 Demographics and some predisposing factors

In 153 cases, the victim was male, in 21 cases, female, and in 11 cases, the authors were unable to determine the gender of the victim.

In the known cases, the average age of deceased divers was 38.87 years (median 38 years). For men, the average age was 37.97 years (median 37 years), for women 43.5 years (median 42.5 years), and in eight of the eleven cases where the sex is not known to the authors, only the age, the average age was 41.75 years (median 47 years). The age distribution is shown in Table 1.

Table 1: Accident rate depending on age

Age range	Number of accidents	Percentage
15-19	7	3.8%
20-29	28	15.1%
30-39	31	16.8%
40-49	27	14.7%
50-59	15	8.1%
60-69	10	5.4%
>69	1	0.5%
unknown age	66	35.7%

In two cases, excessive alcohol consumption was documented in the evening and shortly before the dive, in one case, the ingestion of strong sedatives (in another, analgesics/barbiturates), in one case, the diver's poor condition was known, in another, significantly high cholesterol, and in one case, asthma. However, since data are not available for all cases, the influence of alcohol, sedatives, physical condition, cholesterol, or asthma cannot be statistically taken into account in all Czech and Slovak diving accidents.

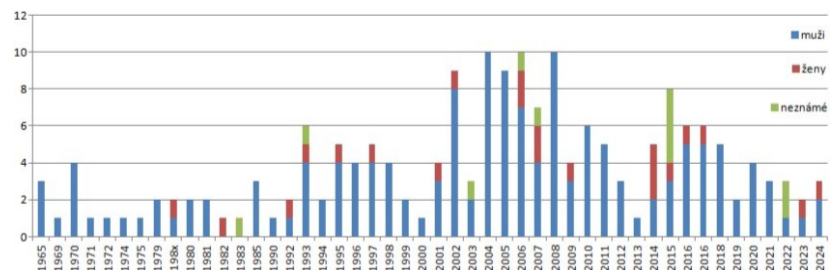


Figure 2: Accident rate of CZ/SK divers depending on gender

2.2 Equipment and experience

The vast majority of accidents occurred during scuba diving. Specifically, 154, of which 5 involved the use of mixtures and 10 involved rebreather diving. 3 accidents occurred during commercial diving (of which 1 involved a breath-hold dive). Furthermore, 14 accidents occurred during breath-hold diving² (of which one involved a commercial dive, see the previous

² Somewhere abroad, accidents involving breath-hold divers and snorkelers are a separate category of diving accidents [5, p. 1].

sentence) and 6 accidents occurred during snorkeling. In the case of 7 accidents, the circumstances are not known and in 1 accident, force majeure intervened (the boat capsized before the dive).

Even the most experienced divers were not spared from accidents. In 7 cases, the victims were diving instructors (of whom 2, coincidentally instructor trainers, cave and technical diving instructors, the problem only manifested itself after surfacing), in 6 divers of the third certification level (Dive leader), in 6 cave divers, in 4 cases rebreather and/or trimix divers and in 5 divers with firefighting diving certifications. On the other hand, in (at least) 8 cases the diver had no certification, 31 of them had a basic certification level and in 8 cases they were divers in training. For 81 divers, no information is available about their certifications, although in at least 7 cases they were experienced or technical divers.

As deaths of uncertified divers can be also considered deaths when victims died while exceeding the limits of their current certifications. For example, when using mixtures, or diving under ice or in a cave without appropriate training. In one case, the body of a victim without cave certifications was transported to a nearby dam by his colleagues after an accident.

2.3 Related circumstances

Not always the accident occurred underwater. There were 127 accidents under water. In another 4, an extraordinary event occurred underwater, as a result of which the diver quickly surfaced and then fell under the water again. In 3 cases, the diver surfaced safely and then sank down. In 7 cases, the problem occurred after surfacing, i.e. after the dive. 9 accidents occurred on the surface. 2 accidents occurred even before the dive, which were followed by a fall to the depth. In 1 case, an extraordinary event occurred on the surface before the dive, so the dive did not

even take place. For 32 events, more information is missing.

Death most likely occurred underwater in 88 cases (of which 71 cases are almost certain). In 44 cases, death probably occurred on the surface. Another 13 deaths occurred in hospital. Information is missing for 40 cases.

In 1 case, the accident occurred before the dive, so the diver did not even dive. In 31 cases, the diver surfaced on his/her own. In 22 cases, a buddy recovered him to the surface. After 83 incidents, it was necessary to first search for the body underwater and recovery it to the surface afterwards. In 3 cases, the divers' bodies were never found. Information is missing for 45 cases.

It was not always an individual accident. In 15 cases, two divers died together at the same time³, and in 1 case, even three divers died at the same time. In at least 5 cases, the buddy of the deceased diver had to be hospitalized after the accident (in at least one case, it left lifelong consequences).

A significant proportion of accidents were caused by health conditions (see discussion below). It is worth mentioning accidents, probably caused by health conditions, which occurred after a safe surfacing (6+2), as well as an accident in which the collapse occurred before the dive. Just peripheral relation to diving has the case of an accident of a diver caused by an overturned boat on the way to/from the site, as well as the accident of a pair of divers who were dropped too close to a reef during strong waves, against which the waves subsequently smashed them. In at least 3 cases, the cause of the accident was a boat running over them on the surface (in one

³ One of the deceased is not included in the statistics above; it was a foreign diver who was assigned as a buddy for a dive on a vacation to a deceased Czech diver.

case, the boat amputated a limb of the injured person, and he bled out).

In several cases, another person may have been involved in the accident, either a supposedly more experienced diver whom the deceased blindly trusted, or in another case, a crane operator tore out a sheet pile, causing the entire dam to break and the diver to be pulled into the pond outlet. In some cases, it is possible that it was not an accident but a intentional event, as there are 3 suspected suicides and 1 suspected insurance fraud.

3 DISCUSSION

The statistical evaluation of diving accidents may seem controversial: a higher number of cases makes the evaluation more precise, but on the other hand it constitutes a negative item that both instructors and divers themselves want to reduce for logical reasons. However, some conclusions can be drawn from those 185 cases. The basis is the table of accident circumstances (see table 2), which, however, must be commented on. *I can offer this comment with my 65 years of diving and 49 years of instructor experience.*

Table 2: Overview of accident circumstances

Circumstances/probable cause of the accident	Number of accidents
solo dive or separation of buddies	65
health problems (heart attack)	32
cave diving	21
breath-hold diving (freediving)	20
inappropriate or missing equipment	10
ice diving	9

In some cases, the cause was not identified, or it was covered by another cause, or there were multiple causes, which are then recorded multiple times.

Also, due to the limited information on many of the accidents, it is not possible to clearly determine their cause (i.e. it is not

possible to determine whether the cause of the accident was, for example, a momentary health condition, loss of breathing medium, loss of orientation, technical failure, etc.). There is little more information about the circumstances of the accidents, which are not the cause of the accident in themselves, but contributed to the accident (e.g. dive without access to the surface, separation of the buddy team, absence of appropriate qualifications, etc.). Therefore, due to the limited input data, the following text will not strictly distinguish between the cause and circumstances of the accident.

The most common cause of problems is a **solo dive or separation of buddies**. If there were two divers at the time of the accident, the second one can help. For example, the GUE⁴ system is based on the idea that if there are three divers on a dive, they can help each other better. This is an idea that is applicable in Florida, where this training system comes from, but in conditions of Czech quarries, the third one would not be seen. A solo dive as such does not automatically lead to fatal problems, but in combination with other possible problems that divers are not aware of, it increases the likelihood of an accident.

Once an older diver brought me an old Poseidon Cyclone regulator for service. The regulator was extremely neglected, with deposits everywhere, but what struck me most was that it only had one second stage. When handing over the serviced regulator, I asked the owner for another regulator for a possible twinset. Her answer surprised me: "I basically dive alone so I don't have to look after anyone." The reverse situation obviously didn't occur to her.

A similar situation occurred with a diver in 2022, at the Rozkoš dam-pond. It is a very shallow site, maximum 14 meters, and very warm at the end of June. The

⁴ Global Underwater Explorers

diver was wearing a dry suit with an undersuit, a full-face mask and a 2 × 15 l twinset. Given his poor health and the technical condition of the equipment, his lifeless body was found on the surface by water scouts after a few hours. He had no one to talk him out of diving or to rescue him immediately.

When it comes to team separation during a dive, it happens relatively often. All training systems advise: search for ½–1 minute, then surface and look for bubbles, and if confident dive after them. A few years ago, a similar separation occurred at the bottom of the Vltava River. The affected diver ran out of air in the primary regulator, although the pressure gauge showed full. The diver had (this often happened before) the Italian manifold isolation valve closed, he forgot to open it and check the equipment before the dive. He solved the situation 40 m after separating from his partner by desperately switching to stage S80, where he had EAN40⁵ with MOD⁶ = 25 m. He was found the next day by police divers.

Divers' **health problems** increase with age. Here, we must appreciate the approach of the SPČR⁷, which requires medical examinations valid for 1 year before starting the course. Most systems are satisfied with checking or not checking the list of contraindications to diving on the Divers Medical Questionnaire/Divers Medical Statement form. This is confirmed by the participant's signature, but not everyone really knows their health condition, or they may hide something just to be able to dive. The number of heart attacks also increases with age. This is how the popular singer K. Z. from the band Spiritual Quintet died in Corsica in 2004. He collapsed after the ascent and could not be revived. He was 55 years old and did not have time to stop for

⁵ Enriched Air Nitrox with 40% of O₂

⁶ maximum operating depth

⁷ Svaz potápěčů České republiky – Divers Association of the Czech Republic

an ordered examination at the hospital in Vinohrady, although he had known about his cardiovascular problem for several years, but attributed it to playing the guitar.

Cave diving is a very specific category. With the development of diving in the 1950s in the USA, the number of divers and their fatal accidents, including accidents in caves, began to increase, see Figure 3.

The peak of fatal cases in the early 1970s was caused by cave dives in Florida (with large number of caves) and where people with only open water experience dived. But these are different from cave conditions, although in Florida caves the conditions are relatively good, that is, up to the ceiling and darkness. Therefore, in the aforementioned years, a group of very experienced divers began specific training focused on cave diving. Safety and training guidelines for cave diving were created and access to caves was limited only to certified cave divers (with some exceptions). This led to a gradual decrease in the number of fatalities in caves, even as the number of divers increased.

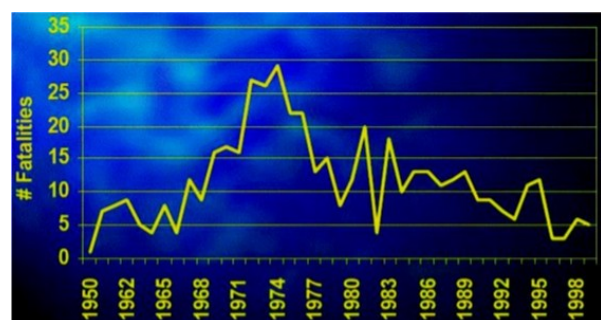


Figure 3: Overview of fatal cave diving accidents from 1950–1998 (of the 475 cases, 401 were in the US and 19 – AU, MX; 10 – ZA; 8 – BS; 5 – DE; 2 – BZ, HN, WLS; 1 – CA, JM, NZ, PR, RH, SU, YU)^{6, 8]}

The number of cave accidents among open water divers is about 20 times higher than that among qualified cave divers [7, p. 4]. For certified divers, the most common

problems are depth, lack of training, new equipment, line problems, and solo dives.

There is a relatively high number of fatal accidents underground (in caves and mines) among Czech divers, a total of 21 cases, but only about 4 cases can be considered as cave certified divers, and of these, barely half correspond to complications caused directly by the cave (darkness and overhead environment). The deaths of cave divers M. Š. and M. Z. in the Amatérská cave in 1970 were caused by a sudden rise in the water level behind the sump after a reported torrential rain [8, p. 1].



Figure 4: Recovering the body of M. N. from the Teplica spring in 1994 [19, pp. 58]

Uncertified divers mostly had problems with the guide line or its non-use (60%), with inadequate or insufficient equipment, or with poor planning, especially air consumption, all supported by a strong motivation to discover. The first case in 1965 is the breath-hold diving of J. Š. in the backdrop of the 13C cave and the last one was probably the health-problematic J. L. in 2018 in the French cave of Cabouy. A much-discussed case is the fatality of T. S., a very experienced instructor, who in

2016 dived in the Ginnie Springs underwater river for 4.5 hours with the RB Liberty. The cause is not clear, perhaps it was an unfinished part of the decompression stop on oxygen, perhaps the increased effort of finning with a large camera, and quite possibly inadequate pre-hospital and hospital care than what Czech divers are used to in their country.

In the 1990s, after the borders were opened, many Czechs and Slovaks began to travel to the Adriatic. This led to many crisis situations. The entire Croatian coast is made of limestone, karst formed, and the many underwater caves attract divers with very clear water. However, many of these divers do not know that the finest sediments settle on the walls and bottom. The visibility, which is fantastic when entering the cave, turns into an opaque white wall after the diver has passed through. And there is no guide line anywhere. He then depends only on his air supply, memory for returning, and a considerable dose of luck to avoid an accident. J. P. was not so lucky near the island of Lirica in Žuljana in 1974.

Breath-hold diving (freediving – FD) is relatively safe, but the diver must not be alone and hyperventilate excessively. During hyperventilation, more oxygen (O_2) does not enter the lungs and bloodstream, as some believe, but the carbon dioxide (CO_2) content, which forces the breath, drops to such a low level that fainting from low oxygen content occurs earlier. This happens during training and competitions. There, in addition to deep divers with SCUBA, freedivers with ABC enter the last 20 m and belay the competitor if he faints so that they can be pulled out immediately. Solo diving or training can be treacherous, such as in 2017, when the successful freediver M. V. trained in the Jilemnice swimming pool. At that time, the few people with the lifeguard who were there that evening only noticed after a long time that they had not seen him for a longer

time than usual. Unfortunately, it was too late.

This is why some countries have started installing sensors on the bottom of swimming pools that will sound an alarm if something is not moving at the bottom. This is especially important when there are too many people in the pool to see the bottom properly.

Inappropriate or missing equipment is also a common occurrence, and in worse cases, the cause of an accident. The most common causes are a missing guide line, inappropriate adjustments to the regulators, lack of service, inconsistent treatment of the equipment after the dive, and even missing equipment. This was, among other things, the cause of the death of V. Ž. in Demänovská Valley and M. N. in the Teplica spring [9, p. 11], both in 1994 during cave diving. Arbitrary, unprofessional intervention in the regulator was a contributing factor to the fatal end of diver K. K. in Vševely in 2015.

Ice diving is closely related to this. In general, diving is no longer limited to $\pm 20\text{--}25$ m from the entrance hole on a rope as before, which had the advantage that a diver in emergency or who was unresponsive could be forcibly pulled out. It only depended on whether each had their own guide or one was tied to the other with about a two-meter rope. The problem is that it is not possible to transmit/receive agreed signals by rope further than about 25 m. Only 2 training systems have the option of using a guide line unwound from a winch, including the SPČR. This places greater demands on both the diver and the instructor, who must be able to handle the guide line well. However, the problem has recently been with diving in well-known dive sites, where divers often go completely without a guide line and safety reels, because they believe that they know it well there.

Another risk is freezing of the regulator (free-flow), whether external or internal, both first and second stage. The preventive principles are clear: dry air in a dry cylinder and dry regulators with anti-freeze treatment. And do not use the compensator and dry suit filling at the same time when inhaling. Also, do not breathe from the regulator outside water. And as soon as the regulator "starts up", know what to do and when to quit the dive. Divers learn all this on a dutiful ice diving course, including training with a guide line on surface. The combination of not using a guide line and free-flow of the regulator led to the fatality of P. M. in 2004 at Svobodné Heřmanice [11, p. 23].



Figure 5: The removal of M.N.'s body from the cave in 1994 [10, pp. 58]

Although it might be a separate category, it is somewhat tricky to attribute **overestimation of one's own abilities** as the cause. Many divers had significantly distorted ideas about their abilities and skills and dived in conditions (depths) for which they were not sufficiently qualified,

or did not have the appropriate equipment for the dive. This exposed them to unnecessary risks, underestimated these risks, and were unable to adequately respond to the emergency situation that arose.

The above text does provide the numbers of individual accidents, but for logical reasons it cannot relate these values to the total number of (Czech and Slovak) divers (and the proportion of female divers). At the same time, there is no information on the number of dives of a given type, nor on the number of dives of the divers involved. The absence of this data somewhat reduces the informative value of the information on the number of accidents. Therefore, the authors would like to appeal to divers, if they have information about a diving accident (whether past or future) or their participants, to share this information with the diving public, or at least to provide it to the authors privately. This obtained data can not only refine the output information on diving accidents, but can also help to find the same causes and circumstances of diving accidents, and thus prevent them.

4 CONCLUSION

Accidents happen, even diving accidents. The fact that many are kept quiet or covered up does not mean that they do not happen. If they are not talked about, it will not be possible to learn lesson from them. And 185 human lives are not a small number. Remembering them can help prevent future accidents. And that is the point of this article.

The general prevention of emergency situations and accidents is therefore:

- regular medical check-ups,
- regular maintenance and servicing of equipment,
- regular diving training,
- regular practice of emergency situations,

- proper planning of dives, especially consumption and control (which is part of both training and the dive).

Misfortunes never come singly, so... Under water, Fortune does not favor the brave. It favors only a diver who is well and fully prepared and certified according to the above criteria.

REFERENCES

- [1] KUDELA, Roman. Smrtelná nehoda potápěče v důsledku vadného vysokotlakého manometru. *CRAA – Ústav bezpečnosti práce ve výškách, z.ú.* [online] 2024. ISSN 2571-0656. Available at: <https://craa.cz/2024/03/01/smrtelna-nehoda-potapece-v-dusledku-vadneho-vysokotlakeho-manometru/>.
- [2] PEJČOCH, Ivo. *Hrdinové Železné opony: útěky do svobodného světa s pomocí neobvyklých technických prostředků v letech 1949-1989*. Cheb: Svět křidel, 2008. ISBN 978-80-86808-52-9.
- [3] KUDELA, Roman. Diver's accident due to foreign object aspiration. *Safety, Work And Rescue Magazine*. 2024, vol. 1, no. pp, pp. 13-21. ISSN 3029-7508. <https://doi.org/10.71319/swarm2401.13-21>. Available at: <https://swarm.craa.cz/nehoda-potapece-v-dusledku-vdechntucizihoteles/>.
- [4] LIPPMANN, John M. a James CARUSO. The investigation of diving accidents and fatalities. *Diving and Hyperbaric Medicine*. 2024. Vol. 54, no. 3, pp. 217-224. doi: 10.28920/dhm54.3.217-224. PMID: 39288927; PMCID: PMC11659060.
- [5] LIPPMANN, John M. Snorkelling and Breath-Hold Diving Fatalities in Australia—A Review of 317 Deaths. *International Journal of Environmental Research and Public Health*. 2025. Vol. 22, no. 1 (119). ISSN: 1660-4601. <https://doi.org/10.3390/ijerph22010119>.
- [6] BOZANIC, Jeffrey, HALPERN, Rebekah. *Cave Diving Fatalities A Summary* [prezentace]. Available at: <https://iucrr.org/wp-content/uploads/2023/04/fatalities.pdf>

- [7] BOZANIC, Jeffrey. Cave divers are mortal! Recent Trends in Cave Diving Fatalities. *Underwater Speleology*. 2005. Vol. 32, no. 4, pp. 4-5.
- [8] DANĚK, Jan. Akce Moravský kras. Záchranář - listovka pro důlní záchranáře a pro vedoucí techniky důlních závodů. Ostrava: Hlavní báňská záchranná stanice v Ostravě - Radvanicích, 1970. Vol. 7, no. 8 (74). pp. 1, 6, 7. Available also at: <https://zachranar.cz/download/zachranar-1970-8/?wpdmdl=2844&refresh=686456b97d8bc1751406265>.
- [9] NOSEK, Pavel. Tisovecká vyvěračka (Tragická nehoda při průzkumu sifonu v j. Teplice u Tisovce). *Speleo*. Praha: Česká speleologická společnost, 1996. Vol. 4, no. 17. pp. 2-11. ISBN 80-85304-42-2.
- [10] HOLÚBEK, Peter. *Po stopách temnoty 2. část - Zo Svätého Kríža, Ploštína, Liptovského Mikuláša a Okolíčného*. Liptovský Mikuláš: Peter Holúbek. 2014.
- [11] KLEINOVÁ, Karolína. *Analýza smrtelných nehod při potápění s přístrojem na území ČR od roku 1997 do současnosti*. Diploma thesis, supervised by Vondrášek, David. Praha: Charles University, Faculty of Physical Education and Sport, Technical and Combat Sports, 2017.