Diving Underwater Work Safety Stats and Facts

FACTS

1. The risk of drowning is a primary concern in underwater work.
2. Working underwater exposes divers to increased pressure. Failure to follow proper decompression procedures can result in decompression sickness, also known as “the bends.
3. Barotrauma refers to injuries caused by the unequal pressure between the body and the surrounding environment.
4. Limited visibility underwater can make navigation and task execution challenging.
5. Cold water temperatures can cause hypothermia, a dangerous condition where the body loses heat faster than it can produce it.
6. Workers may encounter marine life that can pose risks, including venomous or aggressive species.
7. Underwater work often involves equipment, ropes, or structures that can present entanglement hazards.
8. The failure or malfunction of diving equipment, including breathing apparatus, communication devices, or tools, can put divers at risk.
9. Depending on the underwater work site, there may be potential exposure to hazardous substances or pollutants, such as oil, chemicals, or toxic materials.
10. Working underwater can induce stress, anxiety, and psychological pressure on divers.

STATS

- According to OSHA, underwater welders and other commercial divers experience a very high rate of fatality. There are an average of 6 to 13 diving fatalities that occur each year.
- Underwater welders have the highest fatality rate of any

occupation—15%! For comparison, fatality rates for other extremely risky occupations like loggers and fishers are less than 0.2%.

- There were an estimated 3,380 commercial divers in the United States. These divers span multiple industries due to the wide range of jobs and skills and are mostly concentrated in states sharing borders with an ocean or the Great Lakes, performing both inshore and offshore dive operations.
- The Bureau of Labor Statistics reported 460 nonfatal occupational injuries and illnesses among commercial divers involving days away from work.
- Diving has an excellent safety record (1.3 to 2.5 fatalities per 100,000 dives current estimates). There is generally a reasonably low risk in diving when we follow safe diving practices and established standards, but when they are not followed, or when something goes wrong underwater despite these, the severity of a potential injury has serious consequences.
- According to the “Diver’s Alert Network (DAN) Diving Fatalities Workshop Report”, a diving fatality occurs in 1 out of every 211,864 dives.