Between a Rock and a Hard Place
Analysis of Cave Injuries in the UK

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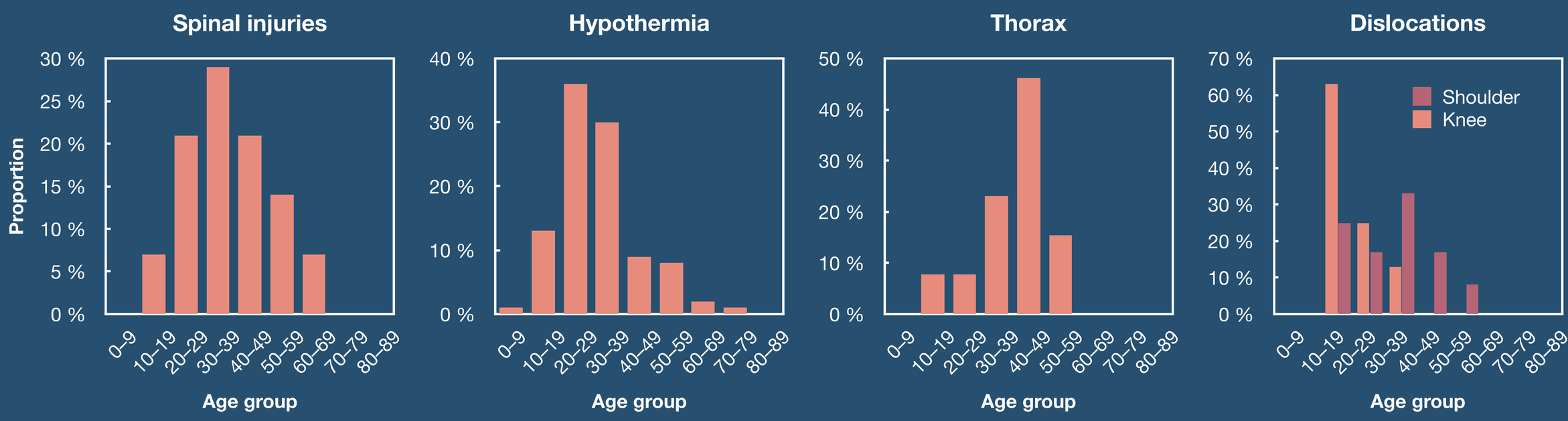
1. Introduction

Caving is a niche recreational activity whereby individuals explore underground terrain. There are no studies that systematically analyse the epidemiology of UK caving injuries. We looked for patterns in caving injuries, which may aid university groups, cave rescue, and other cavers alike.

2. Methods

We analysed 673 incident reports collected between 2000 and 2022. For each of the 646 individual cavers requiring underground assistance, the incident date, age, sex, bodily injury, and primary injury mechanism was recorded. Members of the public entering show caves were omitted such that these data represent active cavers only. Using this information we assessed cave injury epidemiology. We also omitted cave diving deaths.

3. Results



Rescue type

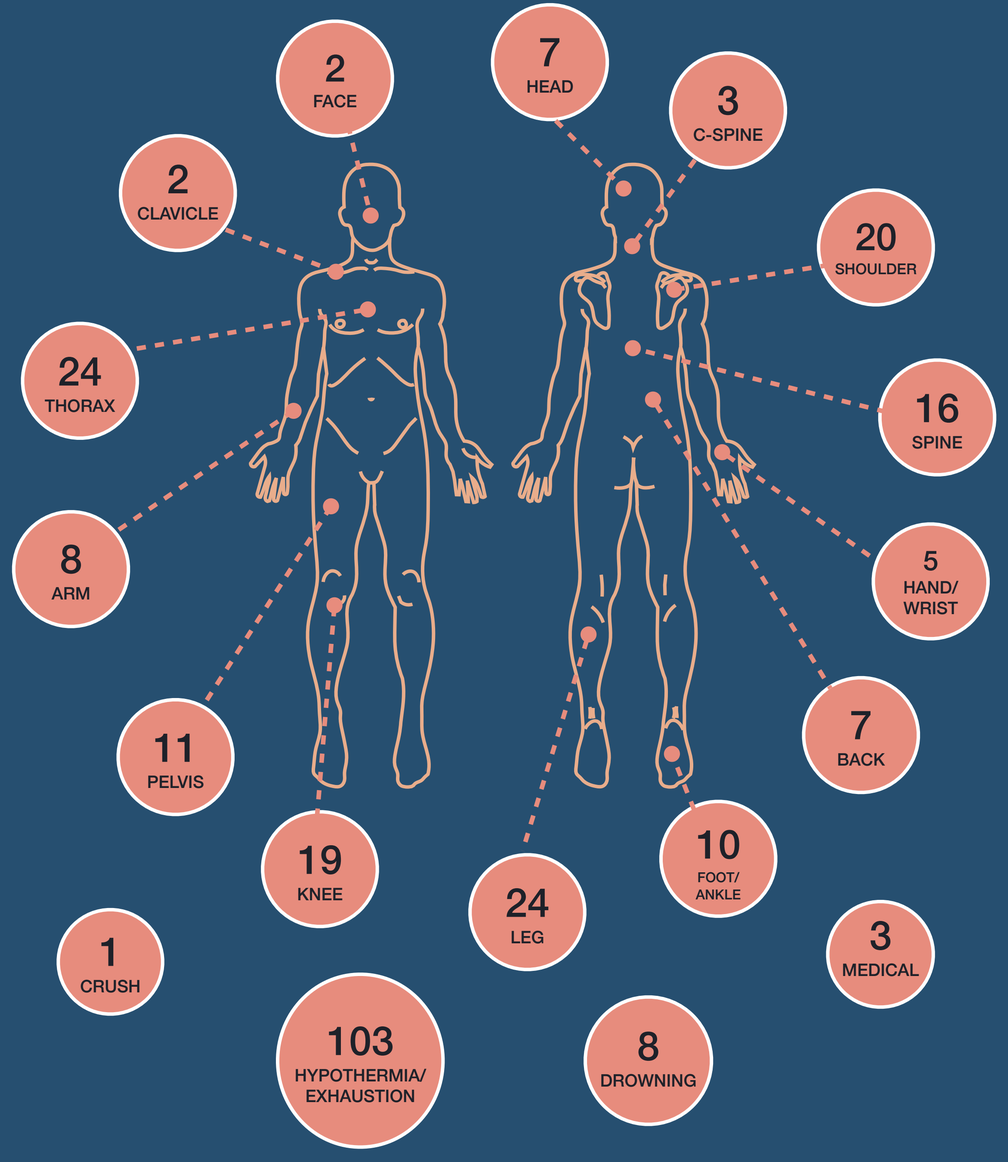
No injury	407 (62 %)
Injured	239 (36 %)
Fatal	13 (2 %)

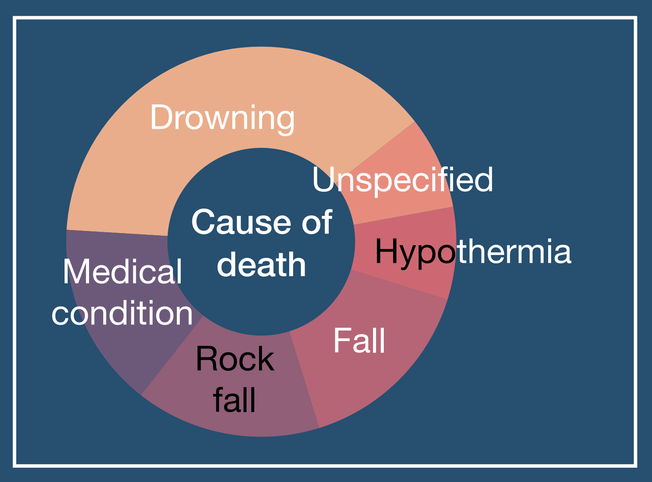
Fall types

Abseil	29 (48 %)
Climbing	7 (11 %)
Traverse	6 (10 %)
Ladder	5 (8 %)
Prussik	1 (2 %)
De-rigging	1 (2 %)
Down a hole	1 (2 %)
Other	11 (18 %)

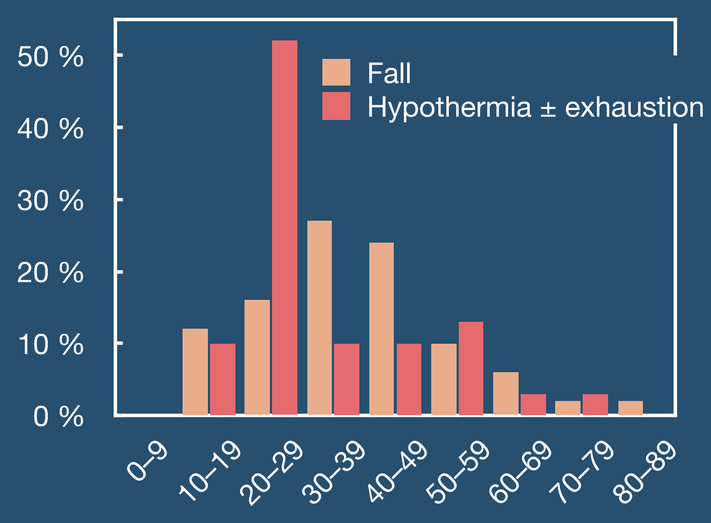
Mean age of…

Injured caver	35 yrs
Deceased caver	43 yrs





Primary injury mechanisms



4. Discussion

In 22 years, 646 people required underground assistance. 239 of these were injured or died, with a total of 291 injuries (some had multiple complex injuries). The most common injury was hypothermia ± exhaustion (30%). Lower limb (18%), upper limb (8%), and thorax injuries (5%), respectively, followed. The mean age of injured cavers was 35, whilst the mean age of cavers with fatal injuries was 42. There are clear differences in the injury type common to different aged cavers. Younger people were more likely to be injured from hypothermia, whereas older people more likely to be injured from falling/slips and trips.

5. Conclusions

Some caving injuries are more common than others; treatment for these injuries should be emphasised during training. Many of the incident reports lacked key information; the BCRC could implement a more standardised approach to recording incidents. The information in this poster will inform cavers, and rescue teams, for their awareness of injuries occurring in caves, which will aid planning for future rescues and general cave safety awareness.