

DEATH OF EXPLORATION WORKER

INCIDENT

During December 1997, a nineteen-year-old exploration employee met his death in circumstances suggestive of heat-exposure. The cause of death was not determined by a post-mortem examination, but the pathologist reported that there were indicators consistent with death due to exposure to extreme heat.

The deceased was a geology student, newly employed by a field-investigations company which was contracted to assist a mining/exploration company with an exploration program in an arid area. He had little previous field experience.

The exploration party, consisting of a supervisor, the deceased and a second field assistant, drove from Perth to their destination and set up camp. The next day was spent working predominantly in and around the camp area. During the night the deceased began to exhibit gastric symptoms and vomited several times. He continued to vomit the following morning when his fieldwork commenced. He and the second field assistant were working together sampling along pre-marked lines on foot, while the supervisor was working some distance away with the party's vehicle. Around mid-morning, the deceased was unable to continue work and set off alone to walk to the vehicle to rest. He never arrived there.

When the supervisor drove around to the area where the two assistants had been working some 30 minutes later, he was informed that the deceased had set off on foot. He instituted a search, which was unsuccessful in locating the deceased. After about an hour to an hour and a half of searching, it was decided to enlist the help of the police, who were contacted via the RFDS HF radio network. After a further 45 minutes or so of searching, the body of the deceased was spotted by the second field assistant (some two and a half hours after he left his companion).

The weather conditions in the area were hot and dry (max 41°C, min 25°C, relative humidity 1 – 12 %). The deceased had no water with him when he set off to walk to the vehicle.

COMMENT AND PREVENTIVE ACTION

This tragic death demonstrates the need for employers and principal employers to ensure that all employees are properly trained and have the necessary skills to survive in the harsh environments commonly experienced in this State, particularly (though not exclusively) in the arid zones. It is well known that death from dehydration can take place very quickly under certain circumstances and conditions. Prevention strategies are eminently practicable, being well known and relatively cheap and easy to implement. All employers in both the productive mining and exploration arms of the industry have statutory duties in this regard.

Some medical symptoms (eg vomiting and severe diarrhoea) may predispose a person to dehydration or exacerbate the effects of climatic conditions. Persons suffering such symptoms should not be allowed to work, particularly alone or in adverse weather conditions. If symptoms are prolonged or severe, medical assistance should be sought.

All persons working in adverse weather conditions should be taught to recognise the symptoms of heat stress/heat exhaustion and heat stroke (hyperthermia) and know how to treat and deal with it. Similar training should be given with respect to hypothermia where persons have to work in conditions at the lower end of the climatic extreme (eg winter, desert, night-time conditions).

No person should be allowed to work or travel (especially alone) without access to an adequate supply of drinking water. All persons in the field should be encouraged to maintain their fluid levels by regularly drinking water. Communications procedures and supervisory checks should be rigorously enforced.

J M Torlach
STATE MINING ENGINEER
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SAFETY AWARENESS SAVES LIVES