

The Medical Course for Proto Teams in South Africa ...an Overview

Introduction

During October 1993 rescue history was made in South Africa when 152 trapped miners were safely hoisted out of a badly damaged shaft following the collapse of a 300 mm pipe column.

For six days rescue teams battled in harsh environmental and physical conditions before the last of the trapped mine workers were evacuated. The unqualified success of the operation was largely due to innovative thinking from both management and the brigades men as well as the courage and determination displayed by the 41 teams used in the operation.

The rescue utilised specialized medical expertise which Mines Rescue Services (MRS) had begun developing some time before.

In 1994 MRS prioritised the expansion and development of this specialized medical expertise. Since then a total of 196 mine medics have been trained in these methods. They undergo an initial four week training course and annually attend a 3 day refresher and update course. (This will be changed in 2004 to two days every six months).

The development of the course

The course evolved from the combined efforts of various experts and training institutions beginning with Goldfields Nursing College who undertook the training with a team of nursing sisters. In 1997 they realised that due to their limited trauma experience, their training was missing a vital perspective.

Goldfields in early 1977 contacted an experienced trauma paramedic Mike Emmerich, who ran a training and supply company called Nexus Medical to do the training on their behalf as well as review the course material and make valid recommendations.

Nexus Medical reviewed the course material and incorporated their own practical experience and in consultation with other major role players in the mining industry adapted the Goldfield's course to incorporate the curriculum drawn up by Mr. Allan Paolini, Dr. Stuart T. Boyd and Dr. G. E. Dimopoulos. This course became known as the MECA course (Mining Emergency Care Assistant) and is the basis of the continually evolving course taught today.

The course must not remain static and is subjected to continual review of all possible new and improved methodologies, materials and experience. It shall forever remain a work in progress.

Aspects of the course

The course covers the relevant anatomy, physiology, traumatology and patient transportation necessary to ensure the greatest chance of survival but also relies heavily upon practical experience gained in the unique environmental model that comprise the deep level mining experience... allowing for all the unusual conditions that mining medics must constantly work in - cramped conditions, zero visibility, high humidity and extreme heat.

Over the past few years the co-operative relationship between MRS and Nexus Medical has become such that research and training is done jointly. All the major role players in the South African Mining Industry are committed to the MECA course, because they have seen and continue to see the benefits provided by the committed members of all their rescue teams. These benefits include the financial and humanitarian gains provided by improved response times to accident scenes, reduced down time and fewer fatalities.

