

ACCEPTING THE CHALLENGE – An Occupational Health and Safety Research Perspective

Jeffery L. Kohler, Ph.D., C.M.S.P
Director, Pittsburgh Research Laboratory
National Institute for Occupational Safety and Health
Pittsburgh, PA 15241
USA

Over the past thirty years we have witnessed a dramatic reduction in mining fatalities, injuries, and work-related diseases. These reductions represent two, three, or even ten-fold decreases from just a few decades ago. The credit for this remarkable achievement comes from many corners: research advancements; manufacturing innovations; labor and industry; mining engineering curricula that integrate health and safety practices, and stronger government regulations.

Despite these successes, data from recent years have shown limited improvement in the health and safety numbers that we use to measure our progress toward our ultimate goal of zero injuries and fatalities. This is especially troubling to all of us who believe that injury and impairment no longer need be consequences of working in the mines.

The challenge before us is clear, and many in the mining industry stand poised to accept this challenge. But exactly what path do we follow to achieve success? Perhaps there are multiple legitimate paths, and in this presentation, I will describe and illustrate one course of action, briefly summarized in five steps. First, we must accurately characterize the present circumstances in relation to safety, looking for sentinel events, and acknowledge the changes in the industry that are taking place. This characterization will be helpful in the second step, which is to develop an understanding of the underlying causes of the problems. Next we propose very general interventions, then ascertain the barriers to these interventions. Once these are known, we execute a focused effort to develop and institute effective interventions. The fifth step is to study and quantify intervention effectiveness so that resources are allocated in a fashion to effect the greatest health and safety benefits.

This approach is not particularly novel, and only takes on value when specific details are added. Although my view of this is strongly influenced by mining safety and health issues in the United States, many of the lessons learned there are transferable, and indeed, many of the lessons learned in Australia and other mining countries have been successfully applied to improve health and safety in the U.S. The global nature of modern minerals production offers new and powerful opportunities to solve old problems and prevent new ones. Goals of this presentation are to identify specific examples that can be useful as we accept this new challenge, and to identify collaborative opportunities for achieving the vision of eliminating occupational injuries and illnesses from the workplace.