

**Project Title:** The Mining Healthy Workplace Program (MHWP)

**Organization:** University of Connecticut Health Center

**Partnerships:** University of Connecticut, Storrs Campus (CPH-NEW)  
Viridian Health Management (VHM)  
University of West Virginia Mining and Industrial Extension (WVUMIE)  
West Virginia Board of Coal Mine and Health & Safety  
James River Coal

**Investigators(s):** Martin Cherniack  
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**Focus Area:** Safety and Health Management Systems

### SYNOPSIS

***Problem Statement and Justification:*** The morbidity and mortality risks to Appalachian coal miners exceed those of many other working populations in the United States. There is controversy over etiology, whether risks are specific to coal mining, or reflect the general rural population. An Institute of Medicine Report in 2005 noted that there is often no precise division between exposures and risks that occur within and outside of the workplace. In 2011, the Center for Disease Control and Prevention (CDC) launched the National Healthy Worksite Program (NHWP) to introduce a more integrated approach to interventions in American workplaces involving work and health. This proposed Mining Healthy Worksite Program (MHWP) reflects a coordinated effort by multiple parties – public health bodies, academia, employers, and mineworkers -- to tailor the NHWP approach to mining and carry to out a year-long health enhancement intervention similar to those being introduced into other NHWP industries.

***Impact of the Research:*** This project will revise the apprenticeship and recertification programs for West Virginia miners by introducing a more integrated health curriculum. Program staff will create the regional inventory of health resources similar to NHWP programs. The VHM, CPH-NEW, and WVUMIE project team will lead participatory wellness teams using a customized set of program materials for mining that include: a mining-specific form of the NHWP CAPTURE™ Health Risk Appraisal (HRA) that profiles individual health risks; the INPUTS™ all-employee survey that assesses health and safety climate; and the CDC Health Scorecard (HSC) that assesses organizational health supports.

***Objective(s) and Research Approach:*** The proposed MHWP has four objectives:

1. Enhanced training: Develop, pilot test, and evaluate expanded health components of the mandatory health and safety curricula for prospective underground and surface miners, and introduce an enhanced health curriculum for the recertification of incumbent miners.
2. Intervention development: Adapt the integrated and participatory OSH and WHP intervention programs of the NHWP to the coal mining industry.
3. Intervention piloting: Introduce yearlong health improvement interventions at 4 mining sites, measuring baseline and follow-up health status of participants, and introducing an integrated, participatory onsite OSH/WHP program that includes personalized health coaching. Compare this with control mining sites receiving the enhanced health education and certification renewal program.
4. Intervention evaluation: Compare the relative costs and effectiveness of the two programs.