Modern work demands are changing and for many the bold line between time at work and time away from work is rapidly disappearing. Work profoundly influences critical choices around our health, from direct workplace exposures, to schedules and other time constraints, to wages and benefits, and to health opportunities and behaviors. Given the ongoing blending of work and home life, new employment arrangements, and the likelihood of a greater number of and more varied jobs over a working lifetime, new solutions are needed to more comprehensively address the exposures today’s workers may receive and the health challenges they may face.

We are also now gaining greater insights into the connection between the cumulative effects of working conditions and workers’ risks for chronic diseases like heart disease, diabetes and obesity. Given the enormous health and economic burden of chronic health conditions for both individuals and society as a whole, there is a need to understand the links between job choice, working conditions, work exposures over a lifetime and their relationships to overall health.

Two experts at NIOSH, Dr. Paul Schulte and Dr. Sudha Pandalai, have led the way in this effort. Their work in a landmark paper, published in 20121, which set the stage for the work in the current NIOSH compendium efforts related to these important interactions.

Their work extends the belief that most diseases, injuries, and other health conditions experienced by working people are multifactorial, especially as the workforce ages. They also contend that the evidence supporting the role of work and personal risk factors in the health of working people is frequently underused or underestimated in importance – and it is rarely used in developing interventions.

Echoing and aligning well with work in the NIOSH Total Worker Health® program, they developed models that take a more comprehensive, lifespan approach, evaluating the influence and interactions of both occupational and personal risk factors on workforce health. Their work illustrated four combinatorial models of occupational hazards and personal risk factors, including such characteristics as genetics, age, gender, chronic disease, obesity, smoking, alcohol use, and prescription drug use. Their work has begun to improve NIOSH’s understanding of the interplay of work and non-work health hazards and has guided improvements in research and interventions.

These efforts recognize an important challenge - most of the diseases, injuries, and other health conditions experienced by working people are multifactorial. Therefore, multifactorial interventions and solutions are needed. Ideally, a better understanding of the interactions between risk factors may help to develop healthier jobs with improved workplace protections and determine the effectiveness of workplace health protection and health promotion interventions.

This presentation will update the latest information on the NIOSH Compendium Project and related efforts to more comprehensively address worker safety, health and well-being.

REFERENCE