Completed Research Projects

Organizational Perceptions, Employee Health and Quality of Care

- Veterans Health Administration
- Major goal: To examine, in the VA national databases, the relationship between organizational characteristics, employee working conditions, and quality/safety of patient care.

Cardiovascular and Stress Responses to Short-Term Noise Exposures

- Harvard-NIOSH Education and Research Center
- Major goal: To provide a foundation for understanding the cardiovascular effects of noise exposures including the features of noise exposure that are responsible for eliciting a cardiac response.

Characteristics of Effective Job Health and Safety Committees

- NIOSH
- Major goal: To understand the characteristics of worker-management Health and Safety Committees (HSC) (such as membership, activities, and communication) that make them more or less effective in reducing work-related injuries and illnesses in the workplace.

<u>Pilot Testing of Direct Postural Measurement Instrumentation in a Nursery</u> <u>Population</u>

- NYCAMH (NIOSH center)
- Major goal: To test the usefulness of 8-hour wrist postural data collection in plant nursery workers, using electrogoniometers and belt-mounted dataloggers.

Developing and Testing a Toolkit for Participatory Workplace Prevention/Health Promotion Interventions

- NIOSH
- Major goal: To develop a toolkit for integrated, participatory, occupational health.

Longitudinal Measurement of Work Stressors in Pregnancy

- CDC/NIOSH
- Major goal: In a prospective cohort of pregnant women, explore the possible effects of workrelated stress on pregnancy outcomes of premature birth and low birth weight.

Organizations, Work Environment and Quality of Care

- AHRQ
- Major goal: In a longitudinal study of community-based health care clinics in the private sector and the VA, to examine the relationship between organizational characteristics, employee working conditions, and quality/safety of patient care.

Exposure Response Relationship in Hand Arm Vibration

- NIOSH
- Major goal: To examine the etiology of vibration-related disease in an international set of cohorts (2 in Connecticut, Volvo in Sweden, and forestry workers in Finland).

Susan Harwood Training Grant Program: Ergonomic Intervention Team and NEWTEC Training Program

- USDOL/OSHA
- Major goal: To develop in-house ergonomic teams and intervention programs in New England high risk sectors (health care, office workers, industry).

Connecticut Upper Extremity Surveillance Project (CUSP)

- CDC/NIOSH
- Major goal: Using a random-digit dial telephone survey in Connecticut, to:
 - Develop population-based prevalence estimates of work-related musculoskeletal disorders (WRMSD).
 - o Determine biomechanical and psychosocial risk factors for WRMSD.
 - Define social and economic consequences of WRMSD.

Work Orders in Regards to IAQ and Indoor Environments

- US EPA- Indoor Environments Division
- Major goal: To provide technical support relative to indoor environments and health and education programs on mold, moisture, climate change and indoor environments and health.

<u>The Development of an Autonomous Motion Tracking System to Monitor</u> <u>Astronaut Movement within a Spacesuit</u>

- NASA
- Major goal: To identify a modality to accurately measure human motion within a spacesuit.

Active Hearing Protectors and Audibility of Critical Communications

- NIOSH/CDC
- Major goal: To develop a hearing protection device incorporating active noise reduction.

Motivators and Barriers to Health and Use of Personal Protective Equipment Among Custodians

- Center for Public Health in the New England Workplace/National Institute for Occupational Safety and Health (CPH-NEW)
- Major goal: To identify motivators and barriers to health and the use of personal protective equipment among custodians, in order to better understand the problem and possible solutions for effective intervention.

<u>Recovery from Catastrophic Weather: Mold Exposure and Health-Related</u> <u>Training</u>

- National Institute for Occupational Safety and Health
- Major goal: To increase knowledge and protective behavior related to mold mitigation and health effects within emergency and recovery respondents in states affected by Hurricane Sandy.

Green Cleaning Among Custodians

• National Institute for Occupational Safety and Health

Green and Healthy Homes

• Connecticut Children's Medical Center

<u>Cardiovascular Effects of Second Hand Smoke in Construction Workers; Young</u> <u>Clinical Scientist Award</u>

- Flight Attendants Medical Research Institute (FAMRI)
- Major Goal: To investigate the associations between acute autonomic and inflammatory cardiovascular responses and the independent and combined exposure to second hand smoke and weld fume in a repeated measures, 4-arm, panel study of boilermaker welders.

Mold and Moisture Assessment Tool- New England School Project

- CDC/NIOSH
- Major goal: To provide outreach and communication to the Bridgeport school district in the use of the NIOSH health and environmental surveillance tools during dampness intervention studies.

Occupational Safety & Health, Core Interest Group

- Connecticut Institute for Clinical and Translational Sciences
- Major Goals: To develop and facilitate a productive, integrated community of stakeholders committed to improving occupational health and safety of Connecticut workers.
- To support seminars, papers, and workshops related to occupational health research at UConn and across the state.

<u>The Mining Health Workplace Program (MHWP)</u>

- Alpha foundation
- Major goal: To improve the health of underground miners in West Virginia, using the CPH-NEW participatory approach, integrating occupational health and safety (OSH) with worksite health promotion (WHP).

Glove and Tool Intervention to Reduce Hand-Arm Vibration

- NIOSH
- Major goal: To provide a practical solution to hand-arm vibration protection from power tools.

<u>Can Noise Induced TTS Cause Persistent Impairment of Speech</u> <u>Understanding?</u>

- NIOSH
- Major goal: To establish whether the temporary change in hearing that is common after exposure to loud noise (termed temporary threshold shift TTS) can lead to ongoing difficulty understanding speech in noisy places or when many people are talking.