# Total Worker Health® Addressing current workforce needs

# Diane Rohlman, PhD Director of the Healthier Workforce Center for Excellence

**Business Leadership Network** 





# Work Can Be Dangerous









## **Economic Factors**

Workers Compensation

Medical Expenses

OSHA Fines/ Penalties



**Decreased Productivity** 

Lost Work Days

High Turnover

# Costs of Work Related Injuries and Illnesses

# **\$250 Billion** (in 2007)

- -8,564,600 work-related injuries  $\rightarrow$  \$192 billion
- 516,100 work-related illnesses → \$58 billion

\$31 billion more than costs of all cancers

\$76 billion more than diabetes

\$187 billion more than strokes

Leigh (2011) Economic Burden of Occupational Injury and Illness in the United States <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0009.2011.00648.x/full">http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0009.2011.00648.x/full</a>.

# **Traditional Workplace Hazards**

Physical	Biological	Chemical	Biomechanical	Safety
Noise Radiation Temperature Vibration	Pathogens Molds	Gases Vapors Dusts Fumes	Force Posture Repetition	Machines Equipment Slips/trips/falls



#### **Obesity by Occupation**

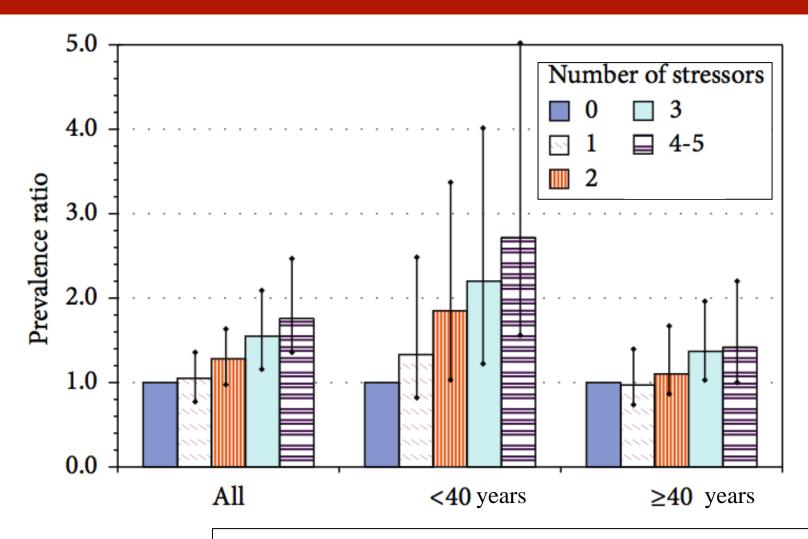
A sampling of U.S. jobs and the prevalence of obesity in that occupational group

Sample Jobs **Obesity Rate for Group HIGHEST** Police officers, firefighters, 40.7% security guards Social workers, clergy, 35.6 counselors Home health aides. 34.8 massage therapists 34.1 Architects, engineers Bus drivers, truckers, crane 32.8 operators, garbage collectors **LOWEST** -Janitors, maids, landscapers 23.5% Cooks, bartenders, 23.1 food servers Physicians, dentists, 22.0 EMTs, nurses Artists, actors, athletes, 20.1 reporters Economists, scientists, 14.2 Average U.S. worker: 27.7% psychologists Note: Obesity defined as body mass index of 30 or above The Wall Street Journal

Source: American Journal of Preventive Medicine's 2014 report based on 2010 data

http:// examinedexistence. com/obesity-byoccupation-aninfographic/

## Risk of Obesity and Number of Stressors



**Stressors**: low decision latitude, poor coworker support, heavy lifting, night work, physical assault at work in past 3 months

# Today's Workplace/Workforce Reality

	METs Median (min, max)	Activity Category
Farm Jobs	3.0 (2.5, 4.5)	Moderate
Goods-Producing		
Mining and logging	3.8 (3.0, 8.0)	Moderate
Construction	4.0 (1.5, 7.5)	Moderate
Manufacturing	3.0 (1.5, 4.0)	Moderate
Service-Providing		
Trade (wholesale & retail), transportation, and utilities	2.0 (1.5, 3.0)	Light
Information	1.5 (1.5, 1.5)	Sedentary
Financial activities	1.5 (1.5, 1.5)	Sedentary
Professional and business services	1.5 (1.5, 2.0)	Sedentary
Education and health services	2.5 (1.5, 4.0)	Light
Leisure and hospitality	2.5 (1.5, 3.5)	Light
Other services	2.5 (1.5, 3.0)	Light

43% of all U.S. Jobs



# Today's Workplace/Workforce Reality

Occupational or not, the time we spend sedentary has well-documented consequences:

Cardiovascular disease
Cancer
Overweight and obesity
Weight gain
Type II diabetes
All-cause mortality

All have been associated with sedentary behavior



# **Changing Workplace/Workforce**

- Increase in precarious or part-time work
- Multiple jobs or 24/7
- Changing demographics
- Changing benefits
- Work is no longer at a worksite





# Impact of Non-Traditional Work Factors

### **Work Factors**

Shift work

Workplace assaults

Lack of decision making authority

Time pressure/workload

Physical fatigue

Lack of affordable

childcare

Low wages

#### **Behavioral Effects**

Cigarette smoking
Alcohol use
Unhealthy eating/obesity
Lack of leisure time exercise



### **Workplace Effects**

Presenteeism Absenteeism Insurance costs Injury risks

### **Physical/Somatic Effects**

Low back pain
High blood pressure
Cardiovascular disease
Depression

## Total Worker Health<sup>®</sup> is...

Policies, programs, and practices that integrate protection from work-related safety and health hazards with promotion of injury and illness prevention efforts to advance worker well-being.



### Total Worker Health<sup>®</sup> is...

Protection from work-related hazards

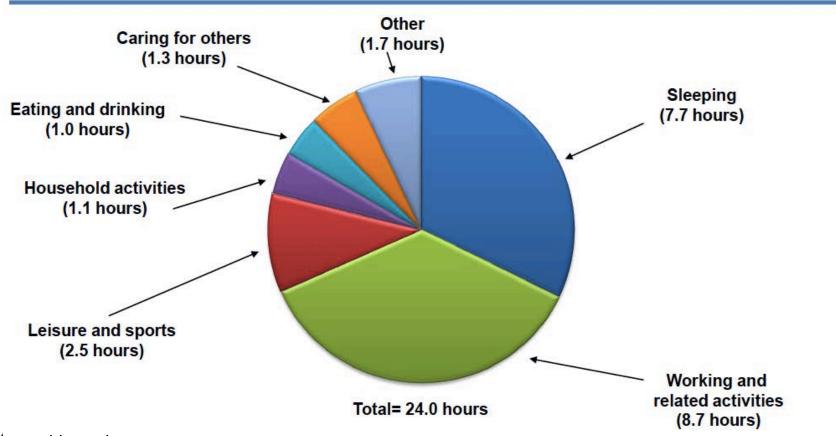


Prevention of injury and illness



# Where do people spend their time?

Time use on an average work day for employed persons ages 25 to 54 with children



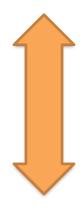
### **Work and Home Often Interact**



# Work













Home



# Healthier Workforce Center @ Iowa

### **Center Goals**

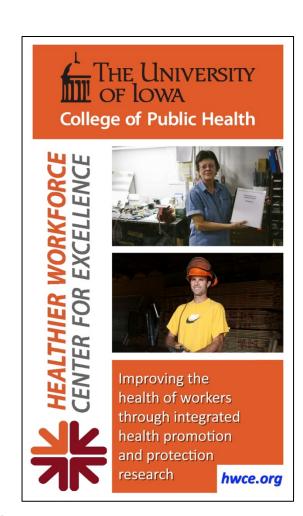
Implement, evaluate and compare health protection and health promotion models

Identify and promote Total Worker Health best and promising practices

Serve as a state and national resource center for employee health programs, services and policies

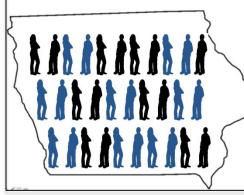
Free video series available at:

www.TotalWorkerHealthEssentials.org



# Healthier Workforce Center @ Iowa

### **Statewide surveys on Iowans**



Urban/rural differences in health, employment and resources

#### **Total Worker Health in Manufacturing**



#### **ERGONOMICS**

Training
Exposure Assessment
Controls

#### WELLNESS

Needs Assessments Facility-Wide Events Health Coaching

#### **Outcomes:**

MSD health General Health Wellbeing

#### **Small Business Outreach**

Majority of business are small and many in rural settings Develop low-cost resources New video series rolling out

(see www.hwce.org)





www.TotalWorkerHealthEssentials.org

# Healthier Workforce Center @ Iowa

#### **Pilot Grant Program**



Law Enforcement

Nurses

Office Workers

Retail

**Food Service** 

**Emerging Workforce** 

Production workers/

**Hispanic Workers** 

**Corrections Officers** 

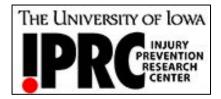
Childcare Workers

### Partnering with other U lowa centers













### **Total Worker Health**





Prevention of injury and illness



www.hwce.org