# THE U.S. WORKPLACE AND JOB STRESS: FINDINGS FROM A NATIONAL SURVEY National Institute for Occupational Safety and Health (NIOSH) TIOSH

#### **Job Stress**

- Definition: Physical, emotional, and/or behavioral responses to excessive pressures or demands at
- Occurs when job expectations do not match a worker's:
  - Capabilities
  - Resources
  - Needs



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## Consequences of Job Stress

- Health and safety problems associated with job stress:
  - Heart disease
  - Weakened immune function
  - Psychological disorders (example: depression)
  - Workplace injury
  - Problematic health behaviors (e.g., smoking, physical inactivity, poor dietary habits) American Institute of Stress, 2005; Kessler et. al (1999), Goetzel, 1998 National Business Group on Health (2005)

job stress:

 \$300 billion annually Health care expenses are nearly 50% greater for workers who report high levels of stress

Costs associated with

Absenteeism, reduced

productivity, employee

turnover, & healthcare costs

### Study Objectives

- To assess the prevalence of job stress in a nationally representative sample of U.S. workers
- To investigate the relationships between job stress and individual (socio-demographic), organizational, and work organization/psychosocial factors









#### **Methods**

- The General Social Survey (GSS)
  - Conducted by the National Opinion Research Center (NORC)
  - Nationally representative U.S. household survey
  - Stratified sample of non-institutionalized Englishspeaking adults, age 18 and older
  - Administered as a 90-minute face-to-face interview
  - Contains a core module and a number of specialized modules

#### CDC TIOSH

#### **Methods**

- NIOSH Quality of Worklife (QWL) Survey
  - Developed with input from expert panel
  - Cross-Sectional
  - Administered to working adults in 2002, 2006, and 2010
  - Assessed a range of work organization and psychosocial factors
  - Evaluated job stress, physical and mental health and aspects of well-being





#### **Measures**

#### Outcome Variable

Job Stress

#### Predictor Variables

- 1) Individual (Socio-Demographic) Factors
  - Age, Gender, Race, Educational Level, Job Tenure
- 2) Organizational Factors
  - Job Category (Occupation), Self/Other Employment, Public/Private (Sector), Organizational Size
- 3) Work Organization/Psychosocial Factors
- Job Demands (Workload), Job Control, Job Security, Supervisor Support, Co-Worker Support, Workplace Discrimination, Workplace Harassment

## **Socio-Demographics**

#### N = 4618

- ■Mean Age: 41.6 years (SD=13.31)
  ■18-34 years: 34.3%
  ■35-49 years: 36.7%
  ■50+ years: 29.0%
- □Gender
  - □ Female: 50.3% (N=2325) □ Male: 49.7% (N=2293)
- ■Mean Years of Education: 13.90 (SD=2.79)

  - 1-12 years: 36.1%
    13 or more years: 63.8%

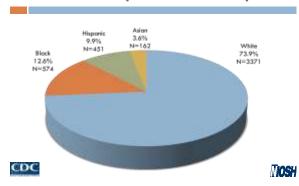








### cial/Ethnic Composition of Sample



#### **Job Characteristics**

#### Self- or Other Employment

- □Employed by Self: 13.7% □Employed by Other: 86.3%

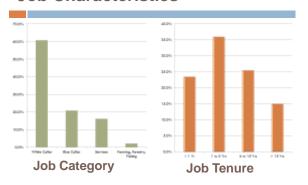
#### □Sector:

- □ Public/Government: 17.1%
- □ Private: 82.9%



TIOSH

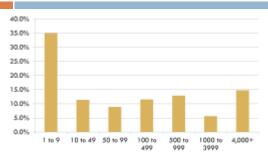
### **Job Characteristics**



#### Job Characteristics



#### **Job Characteristics**



#### Organizational Size (by number of employees)

# Frequencies (Psychosocial

### Factors)

- Job Demands (I have too much work to do everything well. 1= Strongly Disagree; 4=Strongly Agree)
  - 27.6% agreed that they that they have too much work to everything well (i.e. that their job demands/workload is high)
- Job Control (I am given a lot of freedom to decide how to do my own work. 1=Not at all true; 4= Very true)
  - 12.4% indicated that they have little freedom to decide how to do their own work (i.e. that they have low job control)
- Job Security (The job security is good. 1=Not at all true; 4=Very true)
  - 14.5% reported that it was not at all or not too true that their job security is good (i.e. that they experience high levels of job insecurity)





# Frequencies (Psychosocial Factors)

- Supervisory Support (My supervisor is helpful to me in getting the job done. 1=Not at all true; 4= Very true)
  - 15.5% reported that that their supervisors are not helpful to them in getting the job done (i.e. that they experience low supervisor support)
- Co-Worker Support (The people I work with can be relied on when I need help. 1=Not at all true; 4=Very true)
  - 8.7% indicated that co-workers cannot be relied on when help is needed (i.e. that they experience low co-worker support)





# Frequencies (Psychosocial Factors)

- Age Discrimination (Do you feel in any way discriminated against on your job because of your age? 1=No, 2=Yes)
  - 8.4% reported that they have been discriminated against because of age
- Gender Discrimination (Do you feel in any way discriminated against on your job because of your gender? 1=No, 2=Yes)
  - 6.0% reported that they have been discriminated against because of gender
- Racial/Ethnic Discrimination (Do you feel in any way discriminated on your job because of your race or ethnic origin? 1=No, 2=Yes)
- 5.0% reported that they have been discriminated against because of race or ethnicity

## Frequencies (Psychosocial Eactors)

- Sexual Harassment (In the last 12 months, were you sexually harassed by anyone while you were on the job? 1=No, 2=Yes)
  - $\hfill \ensuremath{\text{\textbf{g}}}$  3.3% indicated that they have been sexually harassed
- Other Harassment (In the last 12 months, were you threatened or harassed in any other way by anyone while you were on the job? 1=No, 2=Yes)
  - 9.1% reported they have been threatened or harassed for a reason other than age, gender, or race/ethnicity in the past 12 months

#### Job Stress Prevalence

- Job Stress (How often do you find work stressful? 1=Never; 5=Always)
  - 31% reported that they always or often find work stressful (i.e. that they experience high levels of job stress)









# Analysis: Stepwise Regression

- Outcome Variable
  - □Job Stress
- Predictor Variables
  - Step 1: Individual (Socio-Demographic) Factors
    Age, Gender, Race, Educational Level, Job Tenure
  - Step 2: Organizational Factors
    - Job Category (Occupation), Self/Other Employment, Public/Private (Sector), Organizational Size
  - Step 3: Work Organization/Psychosocial Factors
    Job Demands (Workload), Job Control, Job Insecurity, Supervisor Support, Co-Worker Support, Workplace Discrimination, Workplace Harassment





# Step 3: Individual/Demographic Factors

Predictors	Standardized beta regression coefficient	Statistical significance
Age	116	.000
Gender	006	.768
Education	.080	.000
Job Tenure	.114	.000
Race/Ethnicity	.095	.000

CDC

 $R^2 = .144$ 



## **Step 3: Organizational Factors**

Predictors (Organizational)	Standardized beta regression coefficient	Statistical significance
Self or Other Employment	.014	.481
Public or Private Employer (Sector)	.019	.338
Organizational Size	.013	.489
Job Category (Occupation)	.054	.010

CDC

 $R^2 = .144$ 



## Step 3: Work Organization/ Psychosocial Factors

Predictors	Standardized beta regression coefficient	Statistical significance
Job Demands (Workload)	.240	.000
Job Control	027	.156
Supervisory Support	053	.007
Coworker Support	057	.004
Age Discrimination	.033	.089
Racial/Ethnic Discrimination	.008	.705
Gender Discrimination	.034	.096
Other Workplace Harassment	.106	.000
Sexual Harassment	.016	.415
Job Security	046	.017

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 $R^2 = .114$ 



#### Discussion

- Demographic factors, occupation, and work organization/psychosocial factors were found to be the strongest predictors of job stress in a national sample of U.S. workers
- Although demographic factors are generally fixed, work organization and psychosocial factors are potentially modifiable and could be targeted for intervention

## Possible Approaches to Prevention

- Primary prevention of job stress should start with addressing psychosocial variables in the workplace
- A prevention approach should focus on identifying and/or developing interventions that:
  - Re-design jobs in ways that make workload more manageable for the workforce
  - □ Increase co-worker and supervisory support
  - Reduce job insecurity
  - Improve organizational culture (e.g., establish

