

Total Worker Health for Small Employers



James A. Merchant, MD, DrPH

**Professor and Director
University of Iowa
Healthier Workforce Center for Excellence**

October 6, 2014



**1st International Symposium
to Advance Total Worker Health™**



www.hwce.org

Healthier Workforce Center for Excellence (2006-2016)

Goal 1: To design, implement, and evaluate integrated health protection/health promotion research projects:

- **An office-based nutrition, physical activity and stress reduction program integrated with an ergonomics health protection program (Snetselaar)**
- **A participatory ergonomics program integrated with a health coach health promotion program in window manufacturing (Fethke)**
- **Faculty and student pilot grants (Fethke)**

Goal 2: To implement and evaluate a research-to-practice health protection/disease promotion program (Rohlman)

Goal 3: To serve as a state and national information, education and policy resource

- **Outreach program and community-based pilot grants (Hall)**
- **Real lowans Research Initiative (Merchant)**

Iowa Workplaces by Employment Size 2010

Employer Size	Employers (n)	Percentage
2-9	102,035	86.1
10-19	7,038	6.1
20-49	4,271	3.7
50-249	2,356	2.0
250-999	370	0.3
1000+	83	0.1
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Total	116,153	100.0

DPL & Associates
13th Annual Survey, 2011

REAL IOWANS HEALTH SURVEY

- **Stratified random sample of 1602 Iowa voters ages 18-65**
- **2010 telephone survey with response rate of 47.2% and margin of error for a statewide sample of 2.45%**
- **Survey modules based on published publically available questionnaires, including the CDC QoL, the CDC BRFSS, and the WHO HPQ**
- **Employees (1271)--Self-employed (232), employed by another (963), unemployed (76)**

Merchant et al., JOEM, 2014

Employment Status and Organizational Size

	Self-employed (n=231)	Organizationally Employed (n=940)	
1	49.4%	0.5%	<0.0001
2 to 9	39.0%	14.0%	
10 to 19	7.4%	9.2%	
20 to 49	1.7%	15.6%	
50 to 249	1.7%	26.7%	
250 to 999	0.9%	16.3%	
1000 or more	0%	17.8%	

Merchant et al., JOEM, 2014

Health Insurance by Source

	Self-employed	Organizationally Employed	Unemployed	
Do you have health insurance (% Yes)	87.0% (201/231)	94.4% (909/963)	76.3% (58/76)	<0.0001
Source of Health Insurance	(n=200)	(n=909)	(n=58)	<0.0001
Employer	15.5%	69.2%	15.5%	
Spouse's Employer	33.0%	20.6%	44.8%	
Private Policy	45.0%	6.0%	8.6%	
Federal Program	3.5%	1.1%	20.7%	
Out of Pocket/Other	3.0%	3.1%	10.3%	

Merchant et al., JOEM, 2014

Primary Coverage by Employment Status

	Self- employed	Organizationally Employed	Unemployed	
Do you have a primary care doctor? (% Yes)	83.5% (192/230)	88.4% (850/961)	77.6% (59/76)	0.0063
Did you visit your primary care doctor in the past year? (% Yes)	81.2% (157/192)	85.0% (720/847)	81.4% (48/59)	0.4435

Merchant et al., JOEM, 2014

Hours Worked and Second Jobs by Employment Status

	Self- employed (n=230)	Organizationally Employed (n=955)	Unemployed	
Hours worked in the last 7 days				<0.0001
0-20 hours	22.6%	17.1%	NA	
21-40 hours	26.5%	40.2%	NA	
41-50 hours	19.1%	26.1%	NA	
50+ hours	31.7%	16.6%	NA	
Held a second job	25.4% (59/232)	22.4% (216/963)	24.3% (18/74)	0.6018

Merchant et al., JOEM, 2014

Days Lost to Illness by Employment Status

	Self- employed (n=231)	Organizationally Employed (n=941)	Unemployed	
Entire days missed in last 4 weeks because of physical or mental illness				0.1225
None	92.2%	88.5%	NA	
1 to 2	4.3%	8.3%	NA	
3 or more	3.5%	3.2%	NA	

Merchant et al., JOEM, 2014

Multivariable Models

Potential Risk Factors Measured

- Age
- Male gender
- Currently married
- Self-Employed
- Have health insurance
- Have primary care doctor
- Attended college
- Had college degree
- Workplace <20 employees
- Workplace 50-249 employees
- Never smoked cigarettes
- Ex-smoker cigarettes
- Current smoker cigarettes
- BMI <30
- Income <\$35K
- Income \$35K-\$50K
- Income \$50-\$75K
- Income >\$75K
- Workplace 20-49 employees
- Workplace 250+ employees

Merchant et al., JOEM, 2014

Quality of Life “Healthy Days” by Employment Status

	Self-employed (n=232)	Organizationally Employed (n=963)	Unemployed (n=76)	
General Health (% Excellent/Very Good)	69.9%	65.2%	48.0%	0.0026
Days in which physical health was not good? (% None)	77.9%	69.9%	55.3%	<0.0001
Days in which mental health was not good? (% None)	68.1%	65.3%	56.0%	0.0039
Days in which physical or mental health kept you from usual activities? (% None)	87.1%	83.6%	63.2%	<0.0001
Are you limited in any way... (% No)	80.2%	82.4%	57.9%	<0.0001

Merchant et al., JOEM, 2014

Quality of Life “Healthy Symptoms” by Employment Status

	Self- employed (n=232)	Organizationally Employed (n=962)	Unemployed (n=76)	
Days pain made it hard...(% None)	69.6%	70.1%	45.3%	<0.0001
Days you felt sad, blue...(% None)	67.4%	64.9%	47.4%	<0.005
Days you felt worried, tense...(% None)	43.5%	39.9%	31.6%	0.1784
Days you felt you could not get enough sleep (% None)	20.7%	20.0%	29.0%	0.1758
Days you felt very healthy and full... (% Everyday)	24.0%	24.4%	24.1%	0.9951

Merchant et al., JOEM, 2014

Prevention Behaviors by Employment Status

	Self-employed (n=229)	Organizationally Employed (n=952)	Unemployed (n=75)	
Smoking History				0.0138
Never smoked	64.2%	61.0%	42.7%	
Ex-smoker	23.6%	25.2%	33.3%	
Current smoker	12.2%	13.8%	24.0%	
Received flu vaccine (% Yes)	37.2%	55.6%	51.3%	<0.0001

Merchant et al., JOEM, 2014

Prevention Behaviors by Employment Status

	Self-employed (n=231)	Organizationally Employed (n=961)	Unemployed (n=76)	
Alcohol Consumption				0.1200
None/month	36.4%	32.2%	46.0%	
1 to 9	47.2%	51.6%	36.8%	
10 to 20	11.7%	11.6%	9.2%	
21 or more	4.8%	4.5%	7.9%	
Weekly Exercise				0.0065
Less than once a week	18.0%	22.6%	39.7%	
1-2 days a week	26.8%	27.7%	19.2%	
3-4 days a week	30.3%	25.9%	27.4%	
5 or more days a week	25.0%	23.7%	13.7%	

Merchant et al., JOEM, 2014

Prevention Behaviors by Employment Status

	Self-employed (n=231)	Organizationally Employed (n=963)	Unemployed (n=76)	
Always wear seatbelts visits (% Yes)	69.6%	84.7%	85.5%	<0.0001
BMI (% <30)	67.2%	67.4%	54.2%	0.0697
Eat healthy (fruits, vegetables and whole grains 1-2 times a day)	39.0%	31.1%	35.1%	0.0671
Hours of sleep (%8 or more)	33.2%	24.5%	32.0%	0.0156

Merchant et al., JOEM, 2014

World Health Organization's Health and Work Performance Questionnaire

- **Sickness Absenteeism (Absenteeism) is the total hours of missed work due to illness in the last 7 days work.**
- **Absolute Presenteeism (Presenteeism) is self-rating of overall job performance during the last 4 weeks (0-10 scale x 10).**

Productivity costs = 3x health care costs

Merchant et al., JOEM, 2014

Absenteeism and Presenteeism by Prevention Behavior and Quality of Life Health Rank

	Absenteeism			Presenteeism		
	N	Mean	p	N	Mean	p
QoL Healthy Day Rank			<0.0001			<0.0001
5 Positives	421	0.8		405	86.5	
4 Positives	326	1.4		318	85.2	
1-3 Positives	426	7.9		414	82.8	
QoL Health Symptom Rank			<0.0001			0.0014
5 Positives	67	3.3		57	88.9	
4 Positives	142	0.9		136	88.1	
1-3 Positives	846	3.2		828	84.1	
0 Positives	118	9.6		116	83.9	
Prevention Behavior Rank			0.2792			0.0006
7-10 Positives	267	2.2		258	97.2	
4-6 Positives	797	3.8		771	84.1	
0-3 Positives	109	5.1		108	83.5	

Merchant et al., JOEM, 2014

Absenteeism and Presenteeism by Health Rank Categories

	Sickness Absenteeism			Presenteeism		
	N	Mean	p	N	Mean	p
All Health Rank Categories			<0.0001			<0.0001
15 or more	163	0.3		153	90.1	
13-14	265	0.8		257	85.3	
10-12	445	2.4		434	85.2	
8-9	163	3.4		160	82.6	
7 or less	137	16.5		133	78.9	

Merchant et al., JOEM, 2014

Conclusions--

- **Workplaces of all sizes with employees reporting very good/good quality-of-life, primary care and healthy behaviors are associated with increased measures of productivity**
- **Employers, who pay all lost productivity costs and 60-70% of health insurance costs, have every incentive to enhance their employees' health and quality of life while improving their bottom line**

Total Worker Health Challenges for Serving Small Employers

- **Provide accessible (on-line) TWH information, free tools that promote well-being, healthy behaviors, primary care and health insurance**
- **Partner with local stakeholder organizations to model, translate and champion TWH programs for small employers**
- **Evaluate the efficacy of TWH-stakeholder integration/collaboration interventions through robust assessments of worker health and safety behaviors, injury/health outcome rates, and associated compensation and health care costs**



**Protect employees
and their families
and
Promote
flu vaccinations
in the workplace**

Welcome to the Healthier Workforce Center for Excellence

We are a national resource center for integrated employee health, wellness and safety programs, and practices and policies.

[Resources](#)



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News & Events

Prevention Worth More than the Cure
Corridor Business Journal Publishes HWCE Op-Ed
1st International Symposium to Advance Total Worker Health
October 6-8, 2014
Call for Proposals for Work, Stress & Health 2015
Deadline October 6, 2014



Research Participants

<http://www.hwce.org>

Acknowledgements

NIOSH, Healthier Workforce Center for Excellence Key Faculty and Staff (2006-2014)

Nate Fethke, Diane Rohlman, Jenny Hall, Kevin Kelly, Shelly Campo, Edith Parker, Brenda Buikema, Fred Geer, Leon Burmeister, Linda Snetselaar, Matt Lozier, Alison Amendola

Healthier Workforce Center for Excellence External Advisory Committee (2006-2014)

Wes Alles, Neal Kohatsu, Jane Lipscomb, Mike Parkinson, Nico Pronk, Martin Sepulveda, Barbara Silverstein, Peter Wald, Laurie Welch



Diane Rohlman
Director Designee (12/1/14)