

Building Workforce Resilience:

How to achieve your safety goals by investing in employee mental and physical health



Meet The Speakers



Dr. Joe Leutzinger, PhD

President of Wellness Directions
Business Partner of Headversity
35+ years Wellness Industry Veteran



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CEO and CoFounder of Vimocity
Human Performance & Safety Expert
10+ years experience on Olympic Sports
Medicine Staff



The Future of Safety

Considerations for Building
Workforce Resilience

Joseph Leutzinger, PhD

PRESIDENT OF WELLNESS DIRECTIONS
BUSINESS PARTNER AT HEADVERSITY



What We'll Cover

- The business case for investing in employee health
- The crucial connection between mental wellness and safety
- Opportunities for addressing employee mental health & safety risks



Employer Cost of Poor Health



\$575B

average cost to US employers
annually



\$3.9K

per employee per year



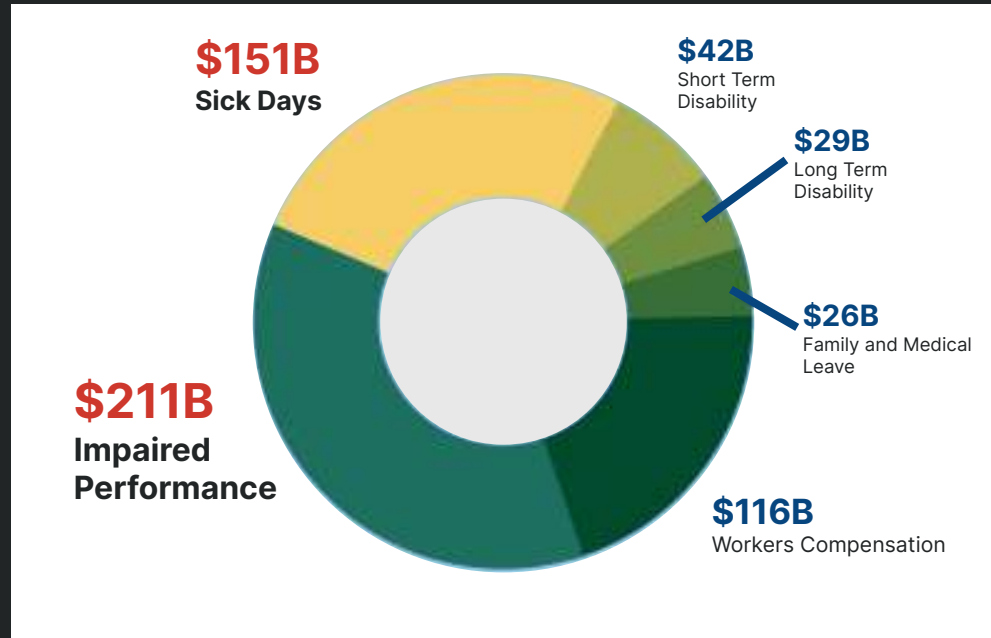
1.5B

days of lost productivity
per year



Sources of Employer Health Costs

Productivity losses is the primary cost driver



The Real Problem



Presenteeism Categories:

1. PERSONAL ISSUES

Family, debt, relationships, substance abuse

2. BUSINESS ISSUES

Job design, work relationships, uncertainty

3. PHYSICAL HEALTH DECLINE

Chronic illness, major illness diagnosis

4. PSYCHOLOGICAL HEALTH ISSUES

The biggest problem affecting an increasing number of people, and still growing



A Presenteeism Report Card

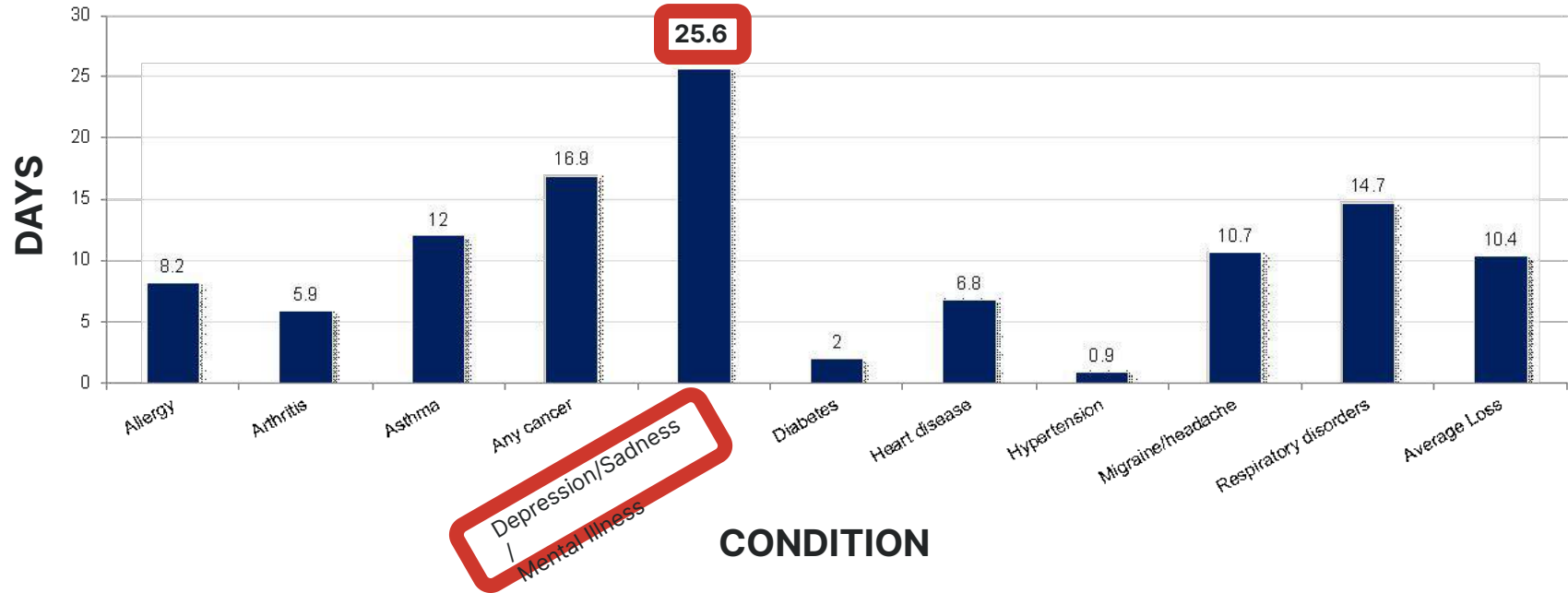
LOCKHEED MARTIN PILOT STUDY

- Assessed impact of 28 medical conditions
- Loss costs based on average salary of \$45,000
- The 28 conditions cost the company \$34 million annually

Condition	Prevalence	Average Productivity Loss	Avg Annual Loss
Migraine	12%	5%	\$434,385
Arthritis	20%	6%	\$865,530
Chronic lower-back pain	21%	6%	\$858,825
Allergies or sinus trouble	60%	4%	\$1,809,945
Asthma	7%	5%	\$259,740
GERD (acid reflux disease)	15%	5%	\$582,660
Dermatitis/ Skin Condition	16%	5%	\$610,740
Flu in the past two weeks	18%	5%	\$607,005
Depression	14%	8%	\$786,600



Average Days Per Year Absent



Employee Assistance Programs (EAPs) and Therapists Are No Longer Enough

17.2%

Of the workforce reports **lost productivity** due to mental distress at work and home

4x more

Unplanned absences for those who report poor mental health

84%

Of workers experienced **at least one mental health challenge** over the past year.

50%

Of an employee's base salary lost per **employee turnover**.
89% who quit their jobs said they felt burned out and unsupported

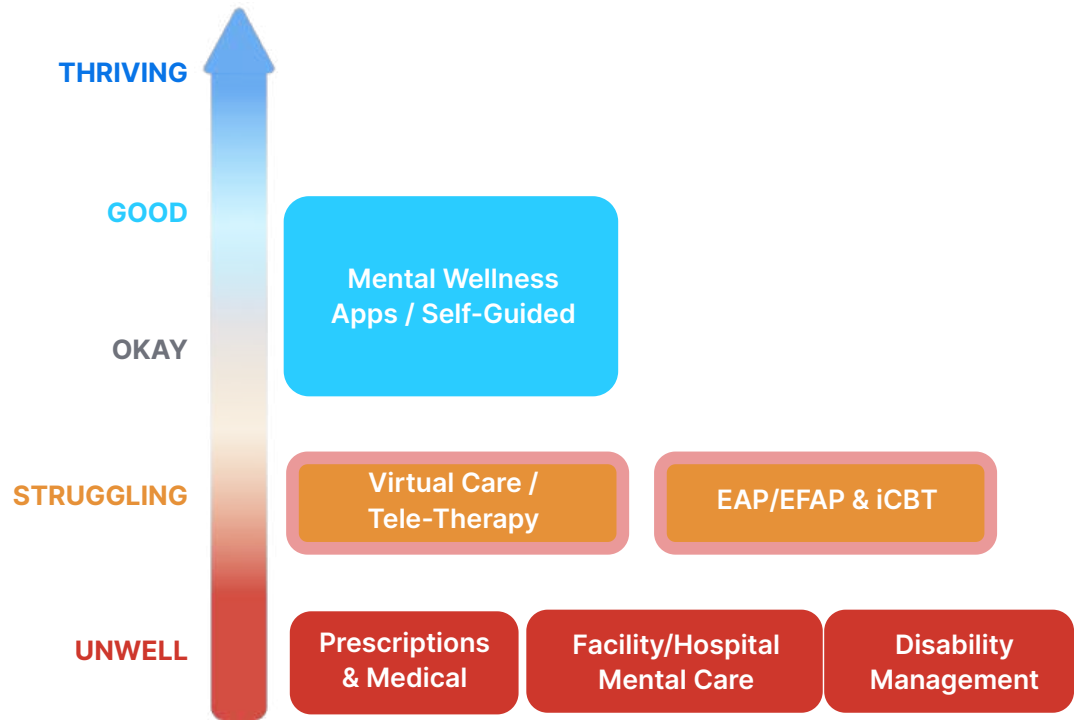
\$3K more

In **healthcare expenses** per year for each employee with anxiety or depression



ECOSYSTEM OF MENTAL HEALTH SUPPORT

The Pre-EAP Has Emerged As The Primary Need



A NEW APPROACH TO EMPLOYEE MENTAL WELLNESS

Leading Companies Now See The Need To Expand Their Approach Beyond Illness



Building Workforce Resilience



The Business Case For Mental Health Prevention

Sample cost analysis for a company of
1,000 with an avg annual salary of \$50K

840 of the 1000 employees experience 1+
mental health challenge (84%)

1 hour of **lost productivity** per day

8 more days of **unplanned absence**
than peers

240 will **turnover** due to burnout,
costing at least 50% of salary to
replace

~~\$3,000~~ more in **healthcare expenses**

TOTAL EMPLOYER COST OF
POOR MENTAL HEALTH

\$15M





THE CONNECTION TO SAFETY OUTCOMES

Mental Health's Impact On Injury Risk

Retrospective study conducted to examine the relationship between health status and injury occurrences:

■ Data matched for employees within safety-sensitive industries who have completed a Health Risk Assessment and experienced an injury as classified by OSHA

■ **11 Risk Factors Examined:**

- Overweight
- Poor diet
- Physical inactivity
- Smoking
- High Cholesterol
- Fatigue
- High BP
- Diabetes
- Asthma
- Stress
- Depression



Building Workforce Resilience

EMPLOYEE HEALTH'S IMPACT ON SAFETY

Retrospective Study Outcomes

Experimental Group

- Employees completing an HRA and experiencing workplace injury in same year (n = 1,023)

Control Group

- HRA data for those not injured (n = 51,769)

Findings

Statistically Significant Predictors of a Workplace Injury:

- Smoking ($p = .000$)*
- Fatigue ($p = .000$)*
- Obesity ($p = .000$)*
- **Depression** ($p = .024$)*



WHAT TO DO ABOUT IT

Opportunities for Addressing Mental Health & Safety Risks

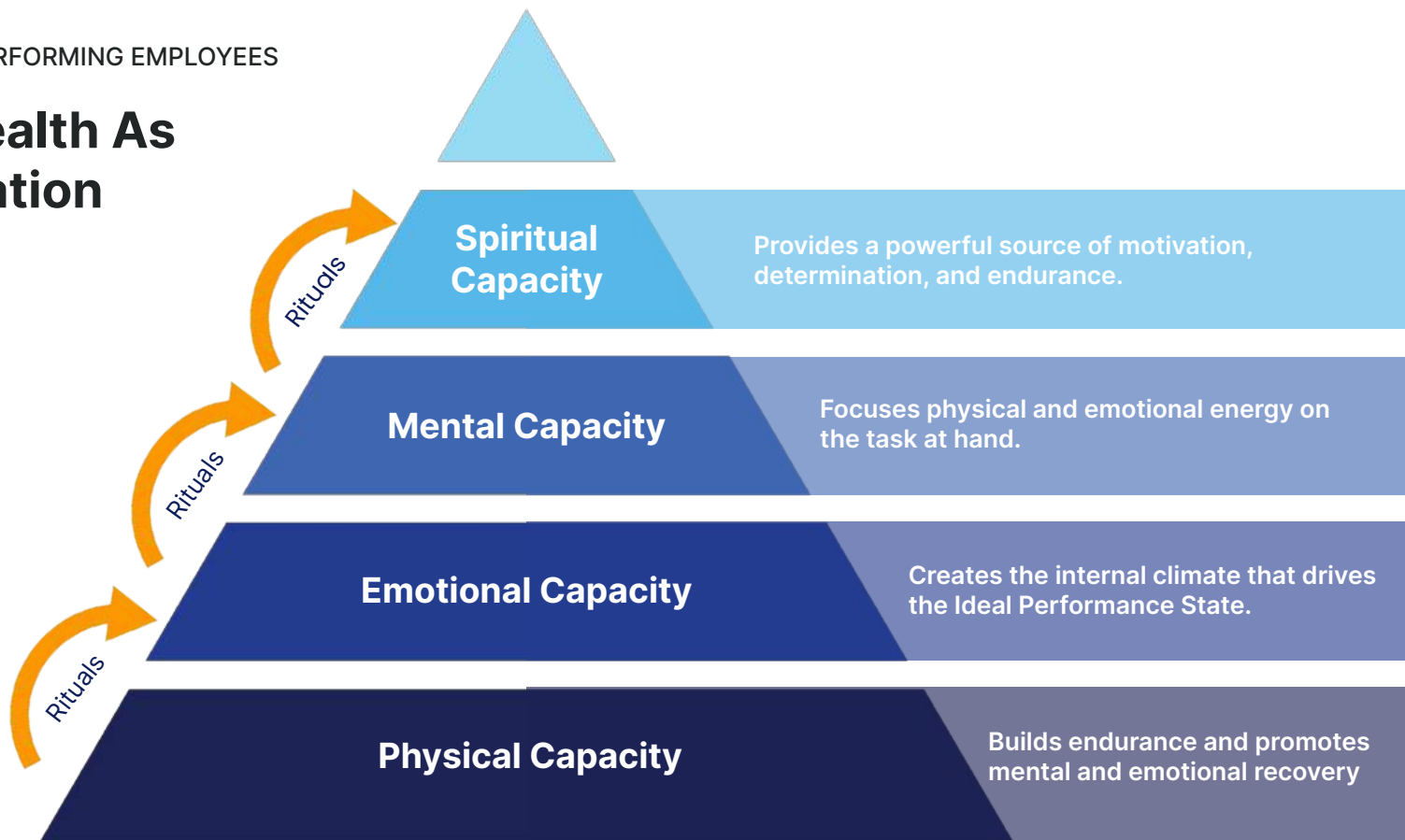
Resource Allocation Considerations for Maximum Impact

- 1 Allocate resources to Pre-EAP programs dedicated to prevention
- 2 Invest in the physical well-being of employees



DEVELOPING HIGH-PERFORMING EMPLOYEES

Physical Health As The Foundation



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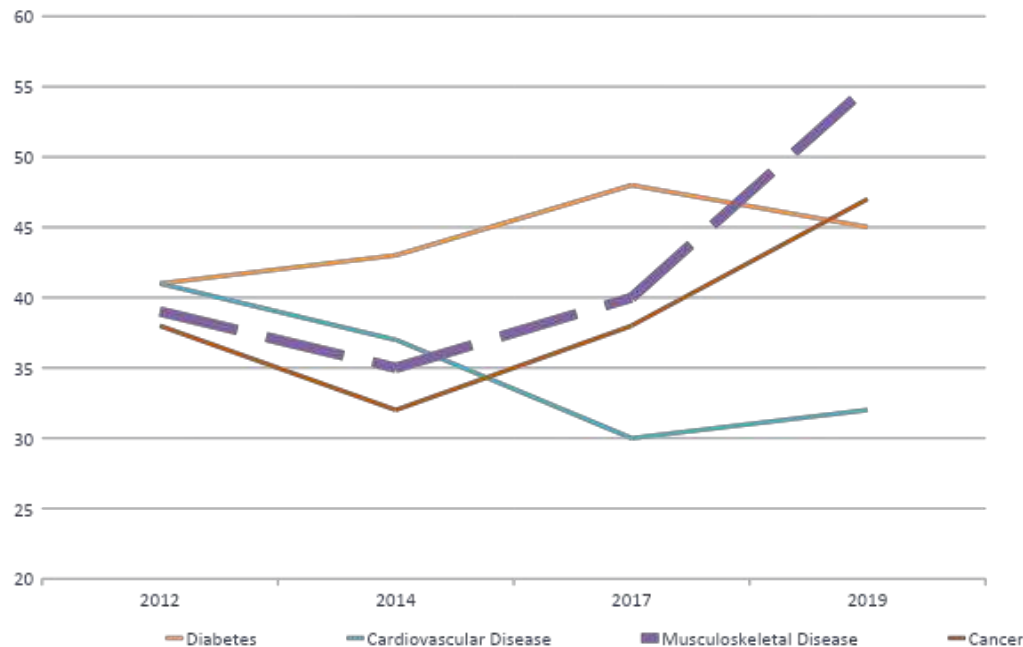
Physical Health: Where To Focus?

Musculoskeletal issues are the low hanging fruit

#1

Source of employer healthcare costs

- MSD's exceed cancer, diabetes & cardiovascular disease
- #1 for disability & lost workdays



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Integrated Benefits Institute 2019 / Liberty Mutual 2018 / Bone & Joint Burden 2017 / Martin, B, Deyo, RA JAMA 2008;299(6):656-664
– costs / Neurosurg Focus 2014 Jun;36(6) – costs / R I Med J (2013) 2014 Oct;97(10):47-49 – costs / Spine 2009 Sep
1;34(19):2077-84 –costs / Spine 2012 Sep 1;37(19):1693-701- costs / MEPS/AHRQ Oct 8, 2014



Summary Points:

1. The cost of poor employee health is often underestimated
2. Mental wellness has a direct impact on safety outcomes
3. Musculoskeletal pain is the low hanging fruit for physical capacity gains

Thank You!

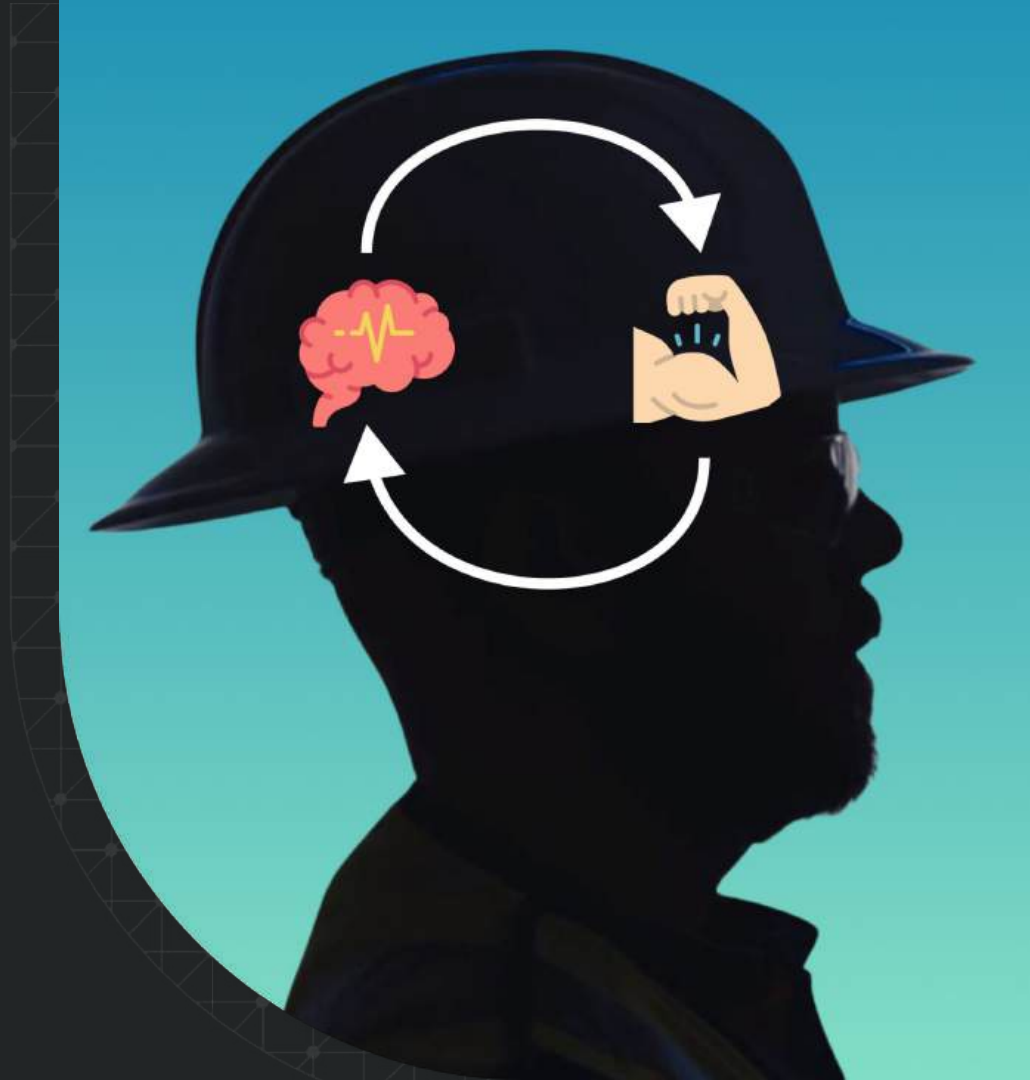
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Building Workforce Resilience

Kevin Rindal, DC

CEO & COFOUNDER OF VIMOCITY



What We'll Cover

- Defining workforce resilience
- 3 ways pain affects employee mental health and safety outcomes
- Opportunities for enhancing the mental and physical capacity of your workforce



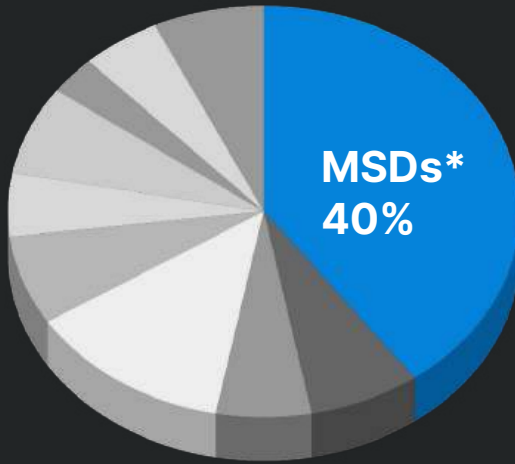
DEFINING WORKFORCE RESILIENCE

An Employee's Current Capacity

- Strength, fitness, mobility
- Mental clarity
- Ability to handle physical and mental stress
- Ability to recover from exertion



#1 Threat to Employee Resilience: PAIN



40% of all workplace
injuries



5.5 Hours
Per Week

Present but not
productive



A Painful Reality

79%

Of 122 lineworkers surveyed
experienced at least moderate
lower back pain weekly



Building Workforce Resilience

#1 Threat to Employee Resilience: PAIN

1 Increased Distraction

2 Mood Decline

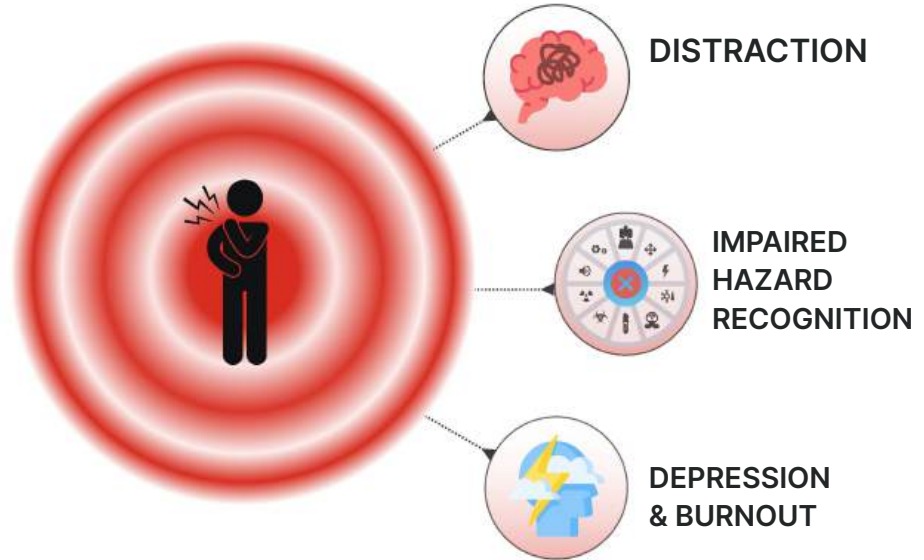
3 Compensatory Injuries



1. The Impact of Pain on Distraction

Pain has been shown to:

- Impair judgment and information processing leading to riskier behaviors
- Narrow focus leading to impaired hazard recognition
- Negatively impact mental health and quality of life



1. [Zhang X, et al. Evidence for Cognitive Decline in Chronic Pain: A Systematic Review and Meta-Analysis. *Front Neurosci*. \(2021\).](#)
2. [Namian M, et al. Effect of Distraction on Hazard Recognition and Safety Risk Perception. *Journal of Construction Engineering and Management*. \(2018\).](#)



In a Setting Where Pain is not a factor.....

Fatal-Four Injuries : Falls, caught-in/between, struck by, and electrocution

57%

Of the “Fatal Four” Hazards were identified by 280 construction workers at 57 job sites.³

18%

Of the “Non-Fatal Four” Hazards were identified by this same group.³

3. [Albert A, Pandit B, Patil Y. Focus on the Fatal-Four: Implications for Construction Hazard Recognition. *Safety Science*, \(2020\).](#)



2. The Impact of Pain on Mood Decline

(Mood Decline: fatigue, anxiety, depression, etc.)

Mood Decline: Frequently associated with chronic pain and can lead to fatigue, burnout and even depression. All of which have been shown to not only negatively affect culture due to spillover and crossover effects, but also result in safety-averse behaviors.^{4,5}



[4. Morgan J, et al. Direct and indirect effects of mood on risk decision making in safety-critical workers. *Accident Analysis & Prevention* \(2013\).](#)

[5. Chong D, et al. The Impact of Emotional States on Construction Workers' Recognition Ability of Safety Hazards Based on Social Cognitive Neuroscience. *Front Psychol* \(2022\).](#)



3. The Impact of Pain on Compensatory Injuries

Pain has been shown to:

- Change the way we move
- Impair balance and muscle activation
- Lead to overuse or strain in other areas of the body
- Cause us to take short-cuts



[6. Sterling M, Jull G, Wright A. The effect of musculoskeletal pain on motor activity and control. *J Pain* \(2001\).](#)

[7. Chang WJ, et al. Altered Primary Motor Cortex Structure, Organization, and Function in Chronic Pain: A Systematic Review and Meta-Analysis. *J Pain* \(2018\).](#)



Solution for Building Workforce Resilience

Building Workforce Resilience

Requires a Holistic Solution



Movement Health



**Ergonomics &
Body Position**



**Recovery and
Performance Optimization**



Movement Health



01
Roll



02
Breathe



03
Move

Body Positioning and Ergonomics

Optimize:

- Force Production & Strength
- Stability
- Reduction of Strain to the Body



Recovery and Performance Optimization

Key Drivers:

- Hydration
- Nutrition
- Sleep
- Stress Reduction
- Movement Health (Recovery)



Building Workforce Resilience Into the Workday



**Pre-Job Briefing & Hazard
Recognition**



**Pre-Job Warmup
(Movement Health)**



**Body Position and
Ergonomics**



**Recovery & Performance
Optimization**



Summary:

- **Pain is a Threat to Workforce Resilience and can lead to:**
 - Distraction
 - Mood Decline
 - Compensatory Injuries
- **Building Workforce Resilience Into the Workday is a Winning Strategy:**
 - Movement Health
 - Body Position/Ergonomics
 - Performance Optimization and Recovery



NOW MORE THAN EVER

Safe & Reliable Energy Requires a Safe & Resilient Workforce

Building Workforce Resilience Drives:



Better Health & Safety Outcomes



A More Productive & Engaged
Workforce



Higher Employee Satisfaction &
Retention

JOIN US

Upcoming Webinar

Safety Leadership

Tuesday, June 18
11:00 AM PST



Follow **Vimocity** on LinkedIn for upcoming details and a chance to register

Questions For Our Speakers?



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Thank You!

