



Work at Home Ergonomics Association of Corporate Counsel National Capital Region (ACC NCR)

By Tim Pottorff, MSc, CIE, ARM





Timothy A. Pottorff,
MSc, CIE, ARM

- ▶ **B.S. & M.Sc., Industrial Engineering**
- ▶ **Positions with Zurich, Alcoa, Texas Instruments, UPS**
- ▶ **Over 30,000 individual audits & assessments globally & across industries**
- ▶ **Numerous articles, regional & national conference speaking roles & volunteer leadership positions**
- ▶ **Principal, QP3 ErgoSystems LLC**
 - Full-service Ergonomics, IH & Safety Consulting Firm
 - Professionals from industry, insurance, OSHA
 - Pioneered video assessments in early 2000's
- ▶ **Scouts BSA Scoutmaster**

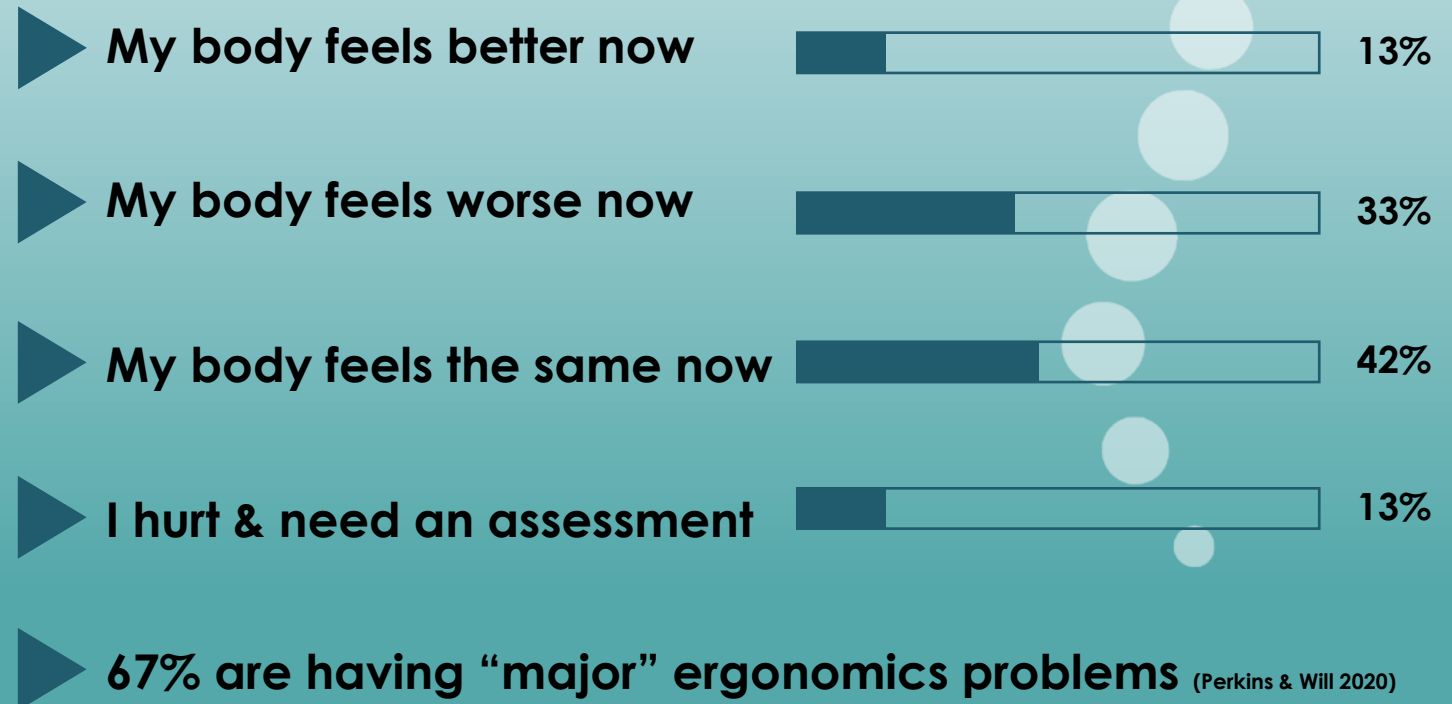


- ▶ **Expert witness for major industrial equipment manufacturer**
- ▶ **Led ergonomics effort for \$450mm Zurich North America HQ (Chicago)**

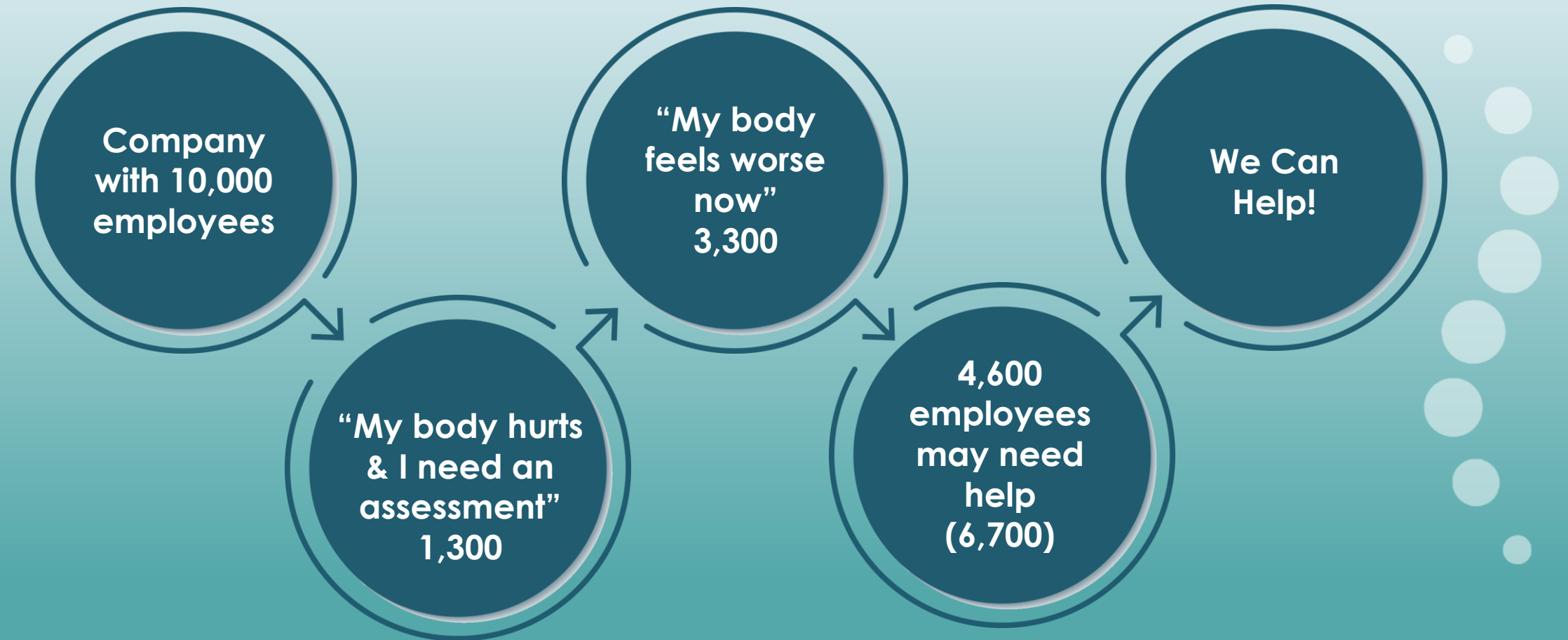
Projects with major organizations

- ▶ Georgetown University, Caltech, Stanford
- ▶ Winston & Strawn, Foley & Lardner, Kirkland & Ellis LLP
- ▶ CBRE, Clayco, Skanska, Aerospace Corp.
- ▶ Estee' Lauder Companies, BASF, Materion
- ▶ Tesla, Ford, Chrysler, Honda Sequencing, Toyota
- ▶ WABTECH, GKN, Pfizer (Pharmacia), Sanofi
- ▶ Meat & Poultry Processing, Boar's Head
- ▶ Hostess, Mrs. Fields, Jamba Juice, Kwik Trip, Nestle'
- ▶ Jet Propulsion Lab, Honeywell, Woodward
- ▶ Apple, eBay, PayPal, HHS, HUD
- ▶ Alaska Native Corporations
- ▶ Omni, Four Seasons, Golf Resorts, Casino properties
- ▶ Crescent Hotels & Resorts, Island Hospitality

How does your body feel now, after a few months of working from home, versus how you felt starting out.



How Might The Survey Apply?





- ▶ **Results of working at home**
- ▶ **Workstation Postures & Accessories**
- ▶ **Kids, pets & electricity**
- ▶ **Hand-held technology**
- ▶ **How to work from home**
- ▶ **Regulatory Requirements**
- ▶ **Corporate Strategies & Responsibilities**

What We Are Seeing



What Some Companies Are Doing

**57% of
companies
reimbursing
some equipment
purchases**

**70% allow
flexible
schedules**

**Est. average
annual savings:
\$11,000 per
employee**



Substandard work areas

Poor postures & increased risk factors

- 50% More pain (neck, shoulders, elbows, wrists/hand/hips, knees, back eyestrain, headaches, chest pains, leg cramps, indigestion, fatigue)

Stipends are not always effective

- Don't know what to get
- Don't know enough about Ergonomics (or have incorrect assumptions)
- Misuse



▶ Psychosocial stress

- Internal stress—not calm, not active, worried about personal finances, family health, loneliness
- Work pressure up 36%
- Compensable in California

▶ Soft tissue injuries & illnesses

- Physical damage to bodies
- **Impact EMR & Premiums the wrong way**

▶ WFH cases are also work-related

- What is your strategy?
- Written plan?

▶ Social issues

- Drug & alcohol abuse (alcohol use up 20%)
- Domestic abuse
- Lack of communication with supervisors/managers
- Lower physical activity—increased health costs



- ▶ **Do not hunch forward**
- ▶ **Sit back into the chair**
- ▶ **Correctly sized**
- ▶ **Adjustable/flexible—and know how to use**
- ▶ **Armrests should lightly support elbows**
- ▶ **Padded**
- ▶ **Do NOT reach for the keyboard/mouse**
- ▶ **Look for furniture packages (desk/chair)**



- ▶ **Ball chairs**
- ▶ **Treadmill workstations**
- ▶ **Kneeling chairs**
- ▶ **Kitchen chairs--DVT**



- ▶ **Separate keyboard--close**
- ▶ **Separate mouse--close**
 - Do not lean/reach forward
- ▶ **Raise documents**
 - Document holder
 - Three-ring binder
- ▶ **QP3 discount at BakkerElkhuizen**
 - QP3Ergo20 (20%)



**Screens at
right angles
to windows**

**Avoid
overhead
lights**

**Blinds &
shades to
deflect light**



- ▶ **Top of screen about eye level (sit or stand)**
 - Lower for bifocal/progressive lenses
- ▶ **Screen aligned with the keyboard/mouse**
- ▶ **Primary monitor on the side of the dominant eye**



- ▶ Hide tape
- ▶ Hide scissors
- ▶ Electric staplers out of reach
- ▶ Keep shredders out of reach
- ▶ Protect wires & cables
- ▶ Don't overload circuits
- ▶ Grounded cords/power strips
- ▶ Online school = work from home



Used more in WFH environments

- 52% have company-provided smartphone

Hand/wrist/neck issues

- Adolescent spinal deformities

Limit stress

- Short messages
- Alternate fingers
- Portrait orientation
- Support devices
- Headsets

(Applied Ergonomics Conference talk & future article in *ISE Magazine*)



- ▶ **Dedicated space**
- ▶ **Daily schedule**
- ▶ **To-do list**
- ▶ **Get up & move**
- ▶ **Raise laptop screen if necessary**
- ▶ **Avoid “other” screens**



- ▶ **72% of employees prefer WFH 2+ days/week (PWC)**
- ▶ **55% of executives expect more WFH (PWC)**
- ▶ **35% do not know when people returning (TCB)**
 - Vaccine important to 5%
- ▶ **39% by end of March 2021**
 - Google: WFH until January 2022
- ▶ **Fewer “assigned” desks & more “hoteling”**
- ▶ **Online at-home education affecting return to offices**

US Regulatory Requirements (Ergonomics)



Federal OSHA

- General duty clause—must address hazards/complaints

California:

- IIPP--conduct claims-related assessments
- Ergonomics Program Standard-general industry
- Suitable Seating Standard
- Hotel Housekeeper MIPP Standard-annual requirements

Maine

- Computer workstation ergonomics training

Ohio & Washington

- Patient handling requirements

New Hampshire

“Shall evaluate all incidences of ergonomically related injuries”



- ▶ **Canada**
 - Most provinces—address MSDs
- ▶ **Mexico**
 - Assess production jobs for risks
- ▶ **UK**
 - Assess work & train employees
- ▶ **EU**
 - Assess & train employees
- ▶ **Japan**
 - “General Duty Clause”
- ▶ **Singapore**
 - Conduct risk assessments



Policy & Process

- What is your written plan?

WFH Ergonomics Training

- Live webinars with feedback
- LMS based/on-demand

Employee Assessments

- Proactive
- Reactive
- Senior Staff & C-Suite
- Accessories & equipment

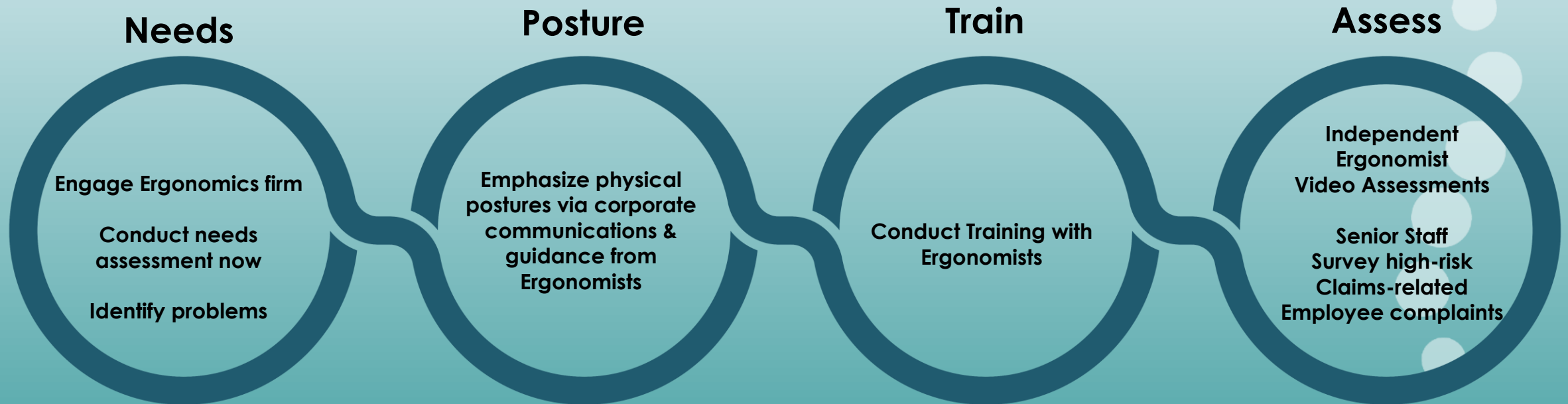
Overtime for non-exempts?

Equipment & accessories

Industrial Ergonomics & Safety

- Productivity, Quality, Profitability improvements

Invest that Savings





▶ Ergonomics Assessments & Training

- Offices (remote/onsite)
- Industrial & Transportation (remote/onsite)
- Hospitality & Cal/OSHA MIPP Compliance
- All other industries

▶ Physical Job Demands Analyses & Stretching

▶ COVID-19 Assessments, Training, Certifications

- Hospitality/Manufacturing/Offices/etc.
- Contagion Response Platforms (business partner)

▶ Additional client services (including commercial insurance)

- Third-party EHS audits
- General Office Ergonomics
- Safety & machine guarding assessments, programs, etc.
- Hazardous materials management assessments, programs, etc.
- General Liability assessments
- Property Protection
- Vehicle fleet consulting
- Industrial Hygiene (air, asbestos, etc.) & noise sampling
- LMS based training

▶ US & Global experience/reach (large DC presence)



www.qp3ergosystems.com

(847) 921-3113

t.pottorff@qp3ergosystems.com