Today we’ll explore:

- Apps and Software
- Sit-stand
- Remote workforce – the rules and best practices
- Using data to reduce risk and injuries
- Safety and wellness programs and their success (and failures)
- Q&A with ERGOhealthy Coach

Advanced ERGO ERGOhealthy Topics
Beyond the Basics: Protecting your company and office employees from injury

Steve Thompson, ARM, COSS
www.ergohealthy.com

Recap of Recent findings – sedentary lives

- Inactivity disrupts DNA repair mechanisms
- Exercise only slightly lessens the health risks of sitting
- Frequent breaks help stabilize blood sugar levels
- Prolonged sitting increases diabetes risk in women
- Time spent sitting is associated with increased risk of cardiovascular disease mortality

BEE GEES
STAYIN' ALIVE
Recap of Recent findings – sedentary lives

- Excessive sitting (10 hours/day) can slow down the body's metabolism, which can affect a person's ability to regulate to metabolize fat.
- New research has found that sitting down for 10 or more hours a day without regular exercise can make a person's cells age prematurely.

Recap - Why office ergonomics

- Sedentary workforce
- Frequently ignored (versus “high hazard” work)
- Proliferation of remote work
- “Explosion” of social networking
  - Facebook
    - More than 1.49 billion active users
  - LinkedIn
    - 365 million members
  - Twitter
    - More than 300 million active users
  - Integra
    - 300 million active users
Does having health insurance…

- Improve healthy behavior?
- Reduce obesity rates?
- Improve safe behavior?
In modern times, does engineering and technology reduce ergonomic injury rates

- Desk vs. Workstation
- Typewriter vs. PC vs. laptop vs. tablet vs. smart phone
- Metal chair vs. padded chair vs. expensive ergonomic chair vs. inexpensive ergonomic chair
- Small ergonomic equipment (document holder, foot rest, other, etc.)
- Regular rest breaks vs. sit-stand workstations
Employee perspective 2020

From an EMPLOYEE perspective, the “office” in 2020 will be...
From an ORGANIZATIONAL perspective, the “office” in 2020 will be...

- A traditional office environment: Employee Perspective 43%, Organizational Perspective 21%
- A private “third working space”: Employee Perspective 26%, Organizational Perspective 32%
- A public “third working space”: Employee Perspective 12%, Organizational Perspective 12%
- A workplace at home: Employee Perspective 41%, Organizational Perspective 56%
- Other: Employee Perspective 56%

Speaking of what works/what’s changing...

Technology is/will be dead/dying/changing
- Traditional cable… growth of content providers
- Blurred lines… TVs, computers, phones, wearables
- Landlines are just about gone – 10%
- Printed materials – going, going...

Other
- Cash, checkbooks, credit cards and ATMs
- USB drives
- VCR machines - Jan 2017 no longer manufactured
Remote work is changing

- Estimates… 78% laptop, 33% mobile phone, Tablet 21%
- Telework (in some form) is offered by 85% of organizations
- Most prevalent flexibility programs offered to nonexempt/hourly workers
  - PT schedules (93%), phased return from leave (93%)
  - Shift flex (91%), Compressed workweeks (88%)
- Career opportunities are not limited by the use of flexible work arrangements. 69% of organizations… career progression or development opportunities are not impacted by an employee’s use of flexibility
- Flexibility training for managers and employees remains a rarity. Only 17% of organizations with at least one flexibility program said they provide training to managers about how to successfully manage employees with flexible work arrangements.

World at Work’s "Survey on Workplace Flexibility"  
https://www.worldatwork.org/adimLink?id=79123

Melding of work, non-work activities

- Employer is mostly likely liable for injuries that occur at home or remotely (WC)
- “Daily” oversight of teleworkers is difficult
- With mobile devices… houses, cars, subways, libraries, bars, airports, parks, beach, etc.
- Email when on vacation… home ill, or at kid’s b-day party?
- 24/7 global economy

The lines between work and personal time are now permanently blurred
Remote work resources

- Telework Toolkit (free) (http://teleworktoolkit.com/)
  - Sample policies
  - Q&A for employers/employees
  - Manager toolkit
  - Training materials
- CalHR Telework Policy (free good samples)
  [http://www.calhr.ca.gov/employees/Pages/telework-policy.aspx](http://www.calhr.ca.gov/employees/Pages/telework-policy.aspx)

How much time do we really spend at work

24 hours/day x 7 days = 168 total hours

Average work hours = 40

40 work hours / 168 total hours = 24%
Sit-stand-lay

Sit-stand

Question 4
Sit-stand study

Health effects of sit-stand desks, interventions aimed to reduce sitting at work are still unproven
https://www.sciencedaily.com/releases/2016/03/160316215136.htm

Question 5

Health among health professionals

Do As We Say, Not as We Do: a cross-sectional survey

Healthcare workers “adhered variably to healthy life choices, the researchers noted, but were usually no better than other Americans.”

Question 6
Do wellness programs work – what does the scientific evidence tell us

- 1998 – 11 Studies “Inconclusive”

- 2012 – 33 Studies “yielded mixed results.”

- 2016 – 5 yr study: “Improvements occurred primarily in the 1st year of participation;” however, “the relative impact of specific incentives could not be discerned.”

- 6/2016

Studies of predicting injuries and ways to reduce risk

- The way things will happen in the future

- Large corporations invest heavily on possible events, risks and business opportunities

- Prediction in business "... is at least two things – important and hard“
Injury prediction studies

- Listening to injured workers: how recovery expectations predict outcomes--a prospective study
  [http://www.ncbi.nlm.nih.gov/pmc/articles/PMC99453/?tool=pubmed]

  - Positive recovery expectations were associated with reductions in pain grade and improvement in functional status outcomes.

- Worker recovery expectations and fear-avoidance predict work disability in a population-based workers' compensation back pain sample

  - Those with acute work-related pain and low recovery expectations, and fears that work may increase pain or cause harm are risk factors for chronic work disability.
Injury prediction studies

- High pain ratings predict treatment failure in chronic occupational musculoskeletal disorders
- High pain ratings before rehabilitation are associated with higher rehabilitation dropout rates.

As an organization you may need to voice an opinion. With the Federal Government looking for ways to further cut back on pain medication, this could result in significant cost increases in WC and health care.

Decision Making – based on Analytics

"What’s past is prologue" (a quotation by William Shakespeare from his play The Tempest)

- Using data mining as a decision maker
- Claims data (but very in-depth)
  - Day of week, time of day, time on the job, age or worker, other factors
- Industry comparisons
Apps for Health

- Posture
  - Lumo Lift (shoulder sensor)
  - UpRight (lower back)
  - MacBreakZ (stretching and breaks)
  - Posture Man Pat (webcam app for posture)

Getting Practical

Don’t Let Your Tablet or Phone Ruin Your Sleep
**Practical tools and tips for health**

- Shut down one hour before bed
- Dim your tablet or phone or use a filter
- Distance from face
- Alternatives (books, magazine, newspaper)
- Turn off alerts
- Filter content
- *Zencast, Headspace, Buddhify*

**Apps for Health**

- Anti-sedentary… getting up and move
  - *Big Stretch* Reminder (breaks and reminders)
  - *Move* (stretches and exercises)
  - *Workrave* (breaks and exercises)
  - *Break Time* (alerts for breaks)
Apps for Health

- **Eyes**
  - Orange-tinted glasses (acts as filter for blue light)
  - *Flux* (auto adjust of monitor tint and brightness)
  - *Awareness* (break reminder with singing bowl)
  - *EVO* (breaks and screen blackout)
  - *Eyelo* (eye exercises)

The Basics

Start with your seat
- Knee height
- Lumbar support
- Depth of seat
Multiple monitors

1. Choose primary monitor and adjust according to typical working position.
2. Set additional monitors 1-2 inches apart horizontally.
3. Vertical positions of monitors should match primary screen.
4. Tilt and swivel each monitor so that the line of sight is centered and perpendicular to the screen.

Remember this…
Smart Phone & Tablet Ergonomics
**Texting Health**

- Limit activities that may cause neck problems
- When possible, bring your tablet, books, and smartphones up to eye level during use
- Integrate stretching of your neck muscles regularly
- Sit with correct posture. Take regular breaks from prolonged sitting.

- 25 pounds = an average 2 year old
- 33 pounds = a cinder block
- 36 pounds = a mid-size microwave
- 40 pounds = a 5-gallon bottle of water
- 50 pounds = a small bale of hay
- 55 pounds = a 5000 BTU air conditioner

**Individual Injury Factors**

- Gender - some studies have found a higher prevalence of some musculoskeletal disorders in women
- Cigarette Smoking - some studies have found smoking related to pain in the extremities, including the neck and back
- Strength - the risk for musculoskeletal injuries (in some studies) was three times greater in weaker subjects
- Anthropometry - weight, height, body mass index, and obesity have all been identified as indicators for certain musculoskeletal disorders
- Physical Activity - a lack (or over exertion) of physical activity may increase susceptibility to injury (sedentary lifestyles?)
Today’s summary

• A ton of good reasons to live an anti-sedentary life

• Proliferation of social media, gaming, and other sedentary activities. Shouldn’t technology be our friend?

• Health insurance does not lead to a healthier lifestyle (in fact the opposite can occur)

• We only spend 24% of a given week at work

• Sit-stand workstations are not yet proven to enhance health in general

• There are a number of apps and tools available for ergonomic health