Working from Home

We’ll begin shortly.

Working from Home: Challenges, Benefits & Return on Investment

May 13, 2021

A Professional Community
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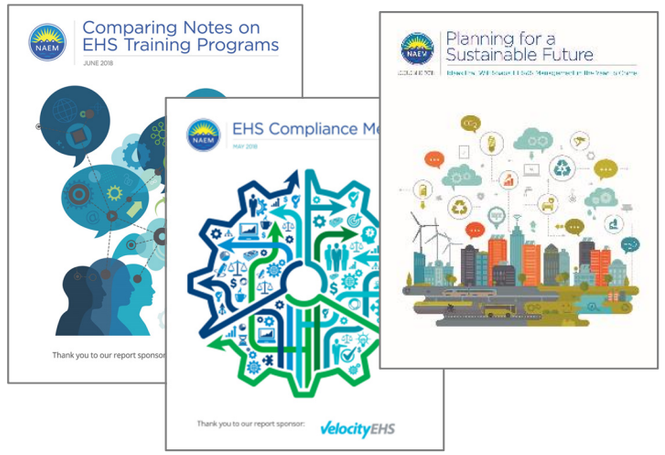
Delivering Knowledge & Professional Wisdom

Peer Conferences

Research Insights



Targeted Networking

Actionable strategies to empower EHS&S leaders to make an impact

120
Corporate Members

4,200
Individual Members

60
Affiliate Members

Reaching an EHS&S Community of

25K+

NAEM Connects EHS & Sustainability Leaders

Rick Goggins, CPE

- Achieved recognition as a Certified Professional Ergonomist (CPE)
- 30 years of experience in ergonomics, consulting to a wide variety of industries and employer sizes
- Member and past president of the Puget Sound Chapter of the Human Factors and Ergonomics Society (PSHFES)
- Member of the Washington State Exoskeleton Advisory Committee
- Published a widely referenced paper on cost benefit analysis for ergonomics

Contact Rick:
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Washington State Department of Labor & Industries

Blake McGowan, CPE

Contact Blake:

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- Director of Ergonomics Research
- Leads the Ergonomics Research group to incorporate the latest technical and scientific data into Humantech's software solutions
- Consults with academia to transfer the latest research knowledge into the Humantech approach, systems, assessment methods, and guidelines.
- Achieved recognition as a Certified Professional Ergonomist (CPE)
- A member of the:
  - Advisory Panel for the IISE Transactions on Occupational Ergonomics and Human Factors journal
  - National Occupational Research Agenda (NORA) Musculoskeletal Health Cross-sector Council
  - American Conference of Governmental Industrial Hygienists (ACGIH)
  - American Industrial Hygiene Association (AIHA)
  - Human Factors and Ergonomics Society (HFES)
- Past Chair and Officer of the AIHA Ergonomics Committee

Overview

- Current state and challenges
- Potential future state and benefits
- Benefit-cost analysis
- Calculating the return on investment
- Participatory process to maximize benefits
- Workstation and equipment recommendations
- Technology to maximize employee benefits
- Handouts of workstation and equipment recommendations

MSD Concerns

Poll Question #1

How is your organization funding your work-from-home workstation and equipment?

- My organization provides a predetermined stipend.
- I took my office equipment home.
- The company lent existing office equipment.
- We fund our own.
- Other

Pre-COVID: Traditional Office Ergonomics Concerns

- >250,000 office ergonomics risk assessments
- 3% of employees were considered higher risk
  - Unique problem
  - Needs professional support
  - Average solution cost - $1,000
- 17% of employees were considered moderate risk
  - Traditional problem
  - Needs basic support
  - Average solution cost - <$250
- 80% of employees were considered lower risk
  - Proper workstation setup
  - No additional support needed

Pre-COVID: Traditional Office Ergonomics Costs

- Workplace injury rates: 0.8 per 100 FTE for office workers
- Roughly 30% are MSD or ergonomics related
- Typical MSD or muscle strain injuries cost roughly $30K in direct costs and roughly the same in indirect costs

COVID Changed Everything

Impact on MSDs

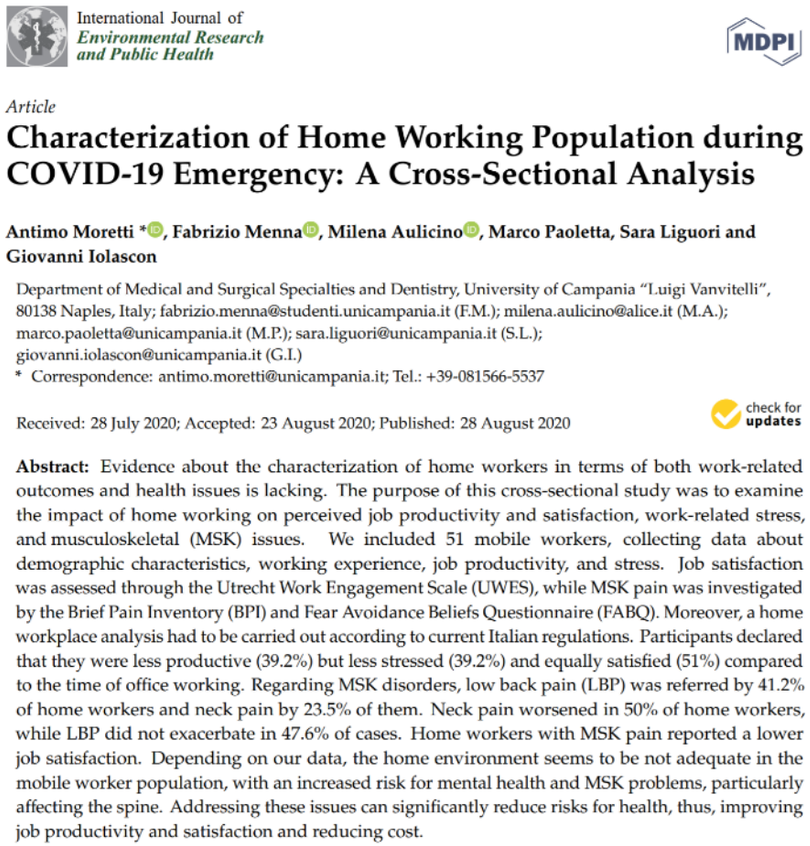
- Recent research from the Institute for Employee Studies (IES), “Working at Home Wellbeing Survey" found:
  - a significant increase in MSD complaints.
  - more than half of the survey respondents reported new aches and pains, especially in the neck (58%), shoulder (56%) and back (55%), compared to their normal physical condition.

https://www.employment-studies.co.uk/resource/ies-working-home-wellbeing-survey

Impact on MSDs

- Recent study of 700+ global employees found:
  - 2 out of every 5 employees (40%) have some serious working from home issues.
  - Top 3 body areas of concerns are:
    - Hands (40%),
    - Back (38%), and
    - Neck (34%).
  - Top 3 issues are:
    - Not using an external keyboard with a laptop (45%),
    - Sitting on a fixed height chair that does not align with the work surface (41%)
    - Not having an external monitor when using a laptop (41%).

Impact on MSDs



International Journal of
Environmental Research and Public Health

MDPI

Article

Characterization of Home Working Population during COVID-19 Emergency: A Cross-Sectional Analysis

Antimo Moretti *, Fabrizio Menna, Milena Aulicino, Marco Paoletta, Sara Liguori and Giovanni Iolascon

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Received: 28 July 2020; Accepted: 23 August 2020; Published: 28 August 2020

check for updates

Abstract: Evidence about the characterization of home workers in terms of both work-related outcomes and health issues is lacking. The purpose of this cross-sectional study was to examine the impact of home working on perceived job productivity and satisfaction, work-related stress, and musculoskeletal (MSK) issues. We included 51 mobile workers, collecting data about demographic characteristics, working experience, job productivity, and stress. Job satisfaction was assessed through the Utrecht Work Engagement Scale (UWES), while MSK pain was investigated by the Brief Pain Inventory (BPI) and Fear Avoidance Beliefs Questionnaire (FABQ). Moreover, a home workplace analysis had to be carried out according to current Italian regulations. Participants declared that they were less productive (39.2%) but less stressed (39.2%) and equally satisfied (51%) compared to the time of office working. Regarding MSK disorders, low back pain (LBP) was referred by 41.2% of home workers and neck pain by 23.5% of them. Neck pain worsened in 50% of home workers, while LBP did not exacerbate in 47.6% of cases. Home workers with MSK pain reported a lower job satisfaction. Depending on our data, the home environment seems to be not adequate in the mobile worker population, with an increased risk for mental health and MSK problems, particularly affecting the spine. Addressing these issues can significantly reduce risks for health, thus, improving job productivity and satisfaction and reducing cost.

- International Journal of Environmental Research and Public Health published survey results of 51 at-home workers in Italy:
  - 41.2% reported low back pain
  - 23.5% reported neck pain
  - About half of the respondents said that their neck pain (50%) had gotten worse since working from home

Moretti A, Menna F, Aulicino M, Paoletta M, Liguori S, Iolascon G. Characterization of home working population during COVID-19 emergency: A cross-sectional analysis. Int J Environ Res Public Health. 2020;17(17):6284.

Impact on MSDs

The Home Office: Ergonomic Lessons From the "New Normal"

As the COVID-19 pandemic spread in early 2020, workers shifted into the home office, which may not fit them ergonomically. This article documents potential problems of home offices and evaluates them for ergonomic concerns.

By Kermit G. Davis, Susan E. Kotowski, Denise Daniel, Thomas Gerding, Jennifer Naylor, & Megan Syck

FEATURE AT A GLANCE:
Millions of workers have been uprooted by COVID-19 (coronavirus disease 2019) and been thrown into a "new normal" of working from home offices. To further complicate things, many individuals were provided with only a laptop and little, if any, education on setting up an ergonomically correct workstation. As a result, many home office–based workers potentially face suboptimal working conditions. Based on 41 home office ergonomic evaluations, most ergonomic concerns related to laptop usage, nonadjustable chairs without armrests, low monitor heights, and hard desk surfaces. If home-based office work continues, people need to understand the ramifications of poor workstation.

KEYWORDS:
telecommuting, ergonomic considerations, desk, computer workstation, monitor, standing workstation, stay at-home, COVID-19

As the COVID-19 (coronavirus disease 2019) pandemic spread in early 2020, the United States was sent into self-isolation in response to widespread stay-in-place orders. As a result, offices and schools were closed and entered into a much more virtual world. The "new normal" has changed our business casual attire to home casual, our in-person meetings into web conferences, and our in-person school rooms into online assignments and virtual lessons. We engage in more screen time than ever before, and we spend long durations in office areas that are poorly designed for long-term use.

With this rapid stoppage of the economy, workers were shifted instantly from the office to the home with their laptops in hand, facing the need to set up an office area with what they had in their home: dining tables and chairs and other makeshift desks, no external input devices or monitors, and environments with dual functions, potentially used by multiple people (e.g., kids for school, adults for work, and family for dinner). These home offices may not fit the worker ergonomically, which could result in a fairly rapid onset of discomfort in the body that may lead to more serious problems in the future.

The point of this article is to document the potential problems of the critical components in the home office such as the chair, desk, input devices, and monitor. Through a quality improvement evaluation for faculty and staff at the University of Cincinnati, current home offices were evaluated for potential ergonomic concerns.

THE ERGONOMIC ASSESSMENT

A survey went out to all of the faculty ($N = 4{,}200$) and staff ($N = 4{,}300$) at the University of Cincinnati that included an email address to send pictures to on completion of the survey so that participants could have their home office evaluated by an experienced ergonomist. The instructions requested two pictures of the individual working, one from directly behind the person using the computer in the home office area and one from the side. One individual (KGD) provided the initial ergonomic assessment, identifying concerns and recommendations. Another individual (SEK) reviewed and edited the assessments, providing any input where it was felt something was missed. The remaining team members coded and classified characteristics of each home office, which were then reviewed by KGD. The following components were classified: (1) monitor (primary/secondary, laptop/external, too high/too low, centered/off centered), (2) chair (chair type, hard seat, too high/too low, five casters, armrests, armrests used, armrests adjusted properly, lumbar support, feet on floor), (3) worksurface (hard front edge, glare, too dark, task light), (4) input devices (external keyboard, laptop keyboard, laptop touchpad or mouse, external mouse), and (5) type of workstation (sitting, standing, other). The data were then summarized across all workstations. The recommendations concentrated on viable and inexpensive fixes for the majority of the concerns identified. All the recommendations were then reported to the individuals, along with encouragement to implement them.

Davis KG, Kotowski SE, Daniel D, Gerding T, Naylor J, Syck M. The Home Office: Ergonomic Lessons From the "New Normal." Ergonomics in Design. 2020;28(4):4-10.

Poll Question #2

In the future, how often do you plan to work from home?

- 0 to 25%
- 25 to 50%
- 50 to 75%
- 75 to 100%

Potential Future State & Benefits

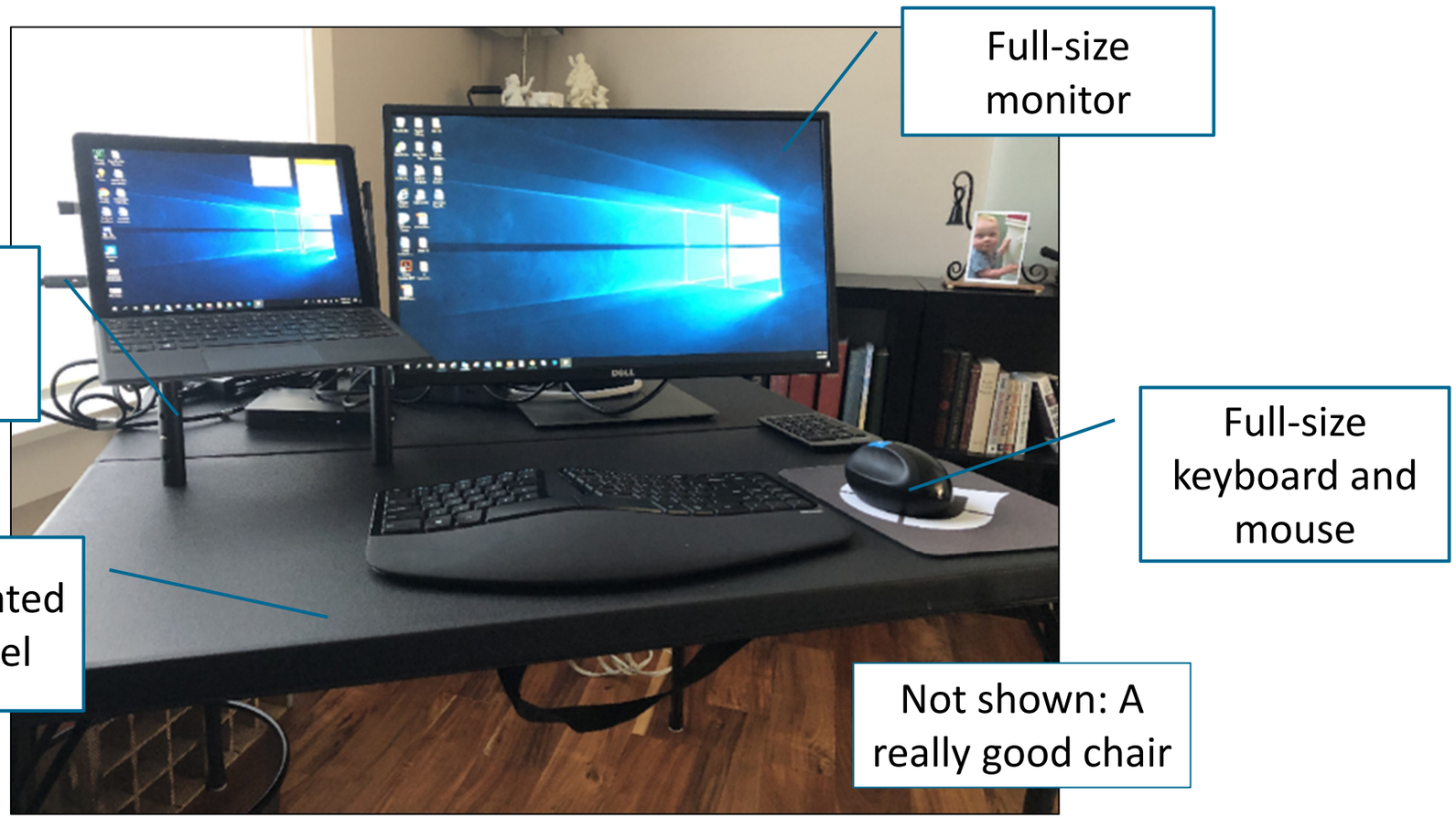
Four Big Questions

- How many people will continue to work remote after the pandemic?
- What's the best ergonomic set-up for remote workers?
- How should we handle hybrid situations (some days in office, some days remote)?
- Is it cost-effective to provide equipment for employee home offices?

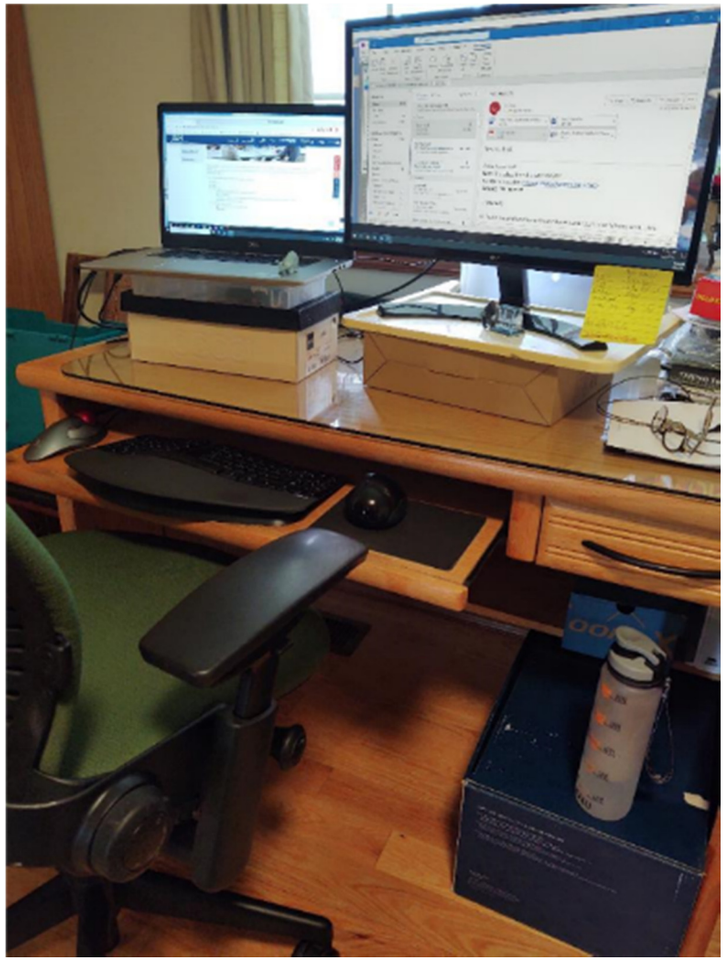
Remote work surveys – common findings

- Employers
  - Most see remote work as successful and want to continue to offer it
  - Would like employees to return to the office for collaboration
- Employees
  - Some would consider leaving if remote work no longer offered
  - Would like more remote work days than employers are planning on
  - Those whose productivity increased most likely to want to continue
  - Newer employees would benefit from more time in the office

Decent Home Setup

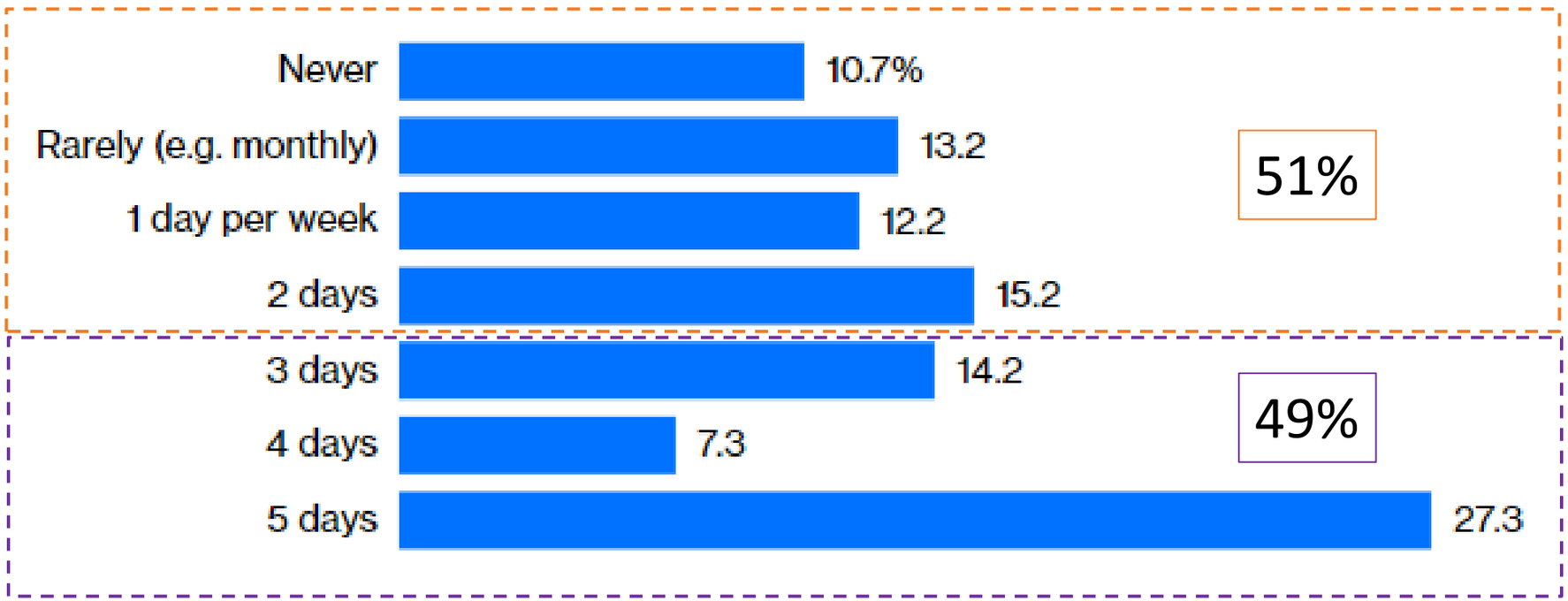


More than One Decent Home Setup



How Many Days Do People Want to Work From Home?

After the pandemic, among workers who can work from home

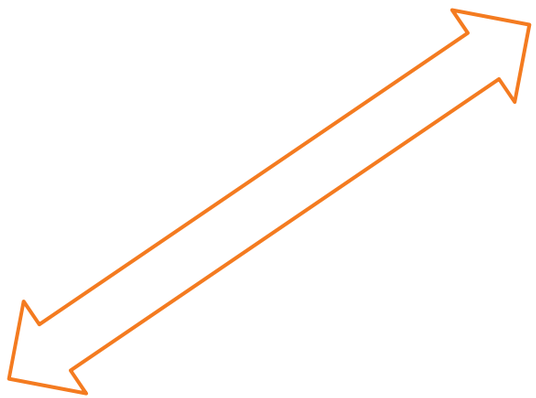


Source: Jose Maria Barrero, Nicholas Bloom and Steven J. Davis, "Why Working From Home Will Stick"

Traditional Office Ergonomics Needs

At the office

- Dedicated workstation
- Sit-stand desk
- Adjustable task chair
- Full size monitor(s)
- Docking station
- Laptop
- Keyboard and mouse



At home

- Table and chair
- Laptop riser

Working from Home Office Ergonomics Needs

At home

- Dedicated desk (sit-stand option)
- Task chair
- Full size monitor
- Keyboard and mouse
- Laptop on riser

At the office

- Drop-in or shared workstation
- Sit-stand desk
- Adjustable task chair
- Full size monitor(s)
- Docking station

Benefit-Cost Analysis

Potential Costs of Working from Home

- Desk
- Chair
- Delivery fees
- Mobile device leasing
- Extra monitor(s)
- Keyboard and mouse
- Laptop stand
- Smartphone or softphone with headset
- Stipend for internet or cell

A lot of these costs have already been paid

Potential Savings of Working from Home

- Reduced real estate footprint and building operation costs
- Reduced absenteeism (for some)
- Increased productivity (maybe)
- Increased engagement (at the sweet spot)
- Improved recruitment and retention
- Reduced injury rate?

Organizations are Shifting Costs to Employees

$ $ $ $

Real estate
Utilities
Cleaning and maintenance

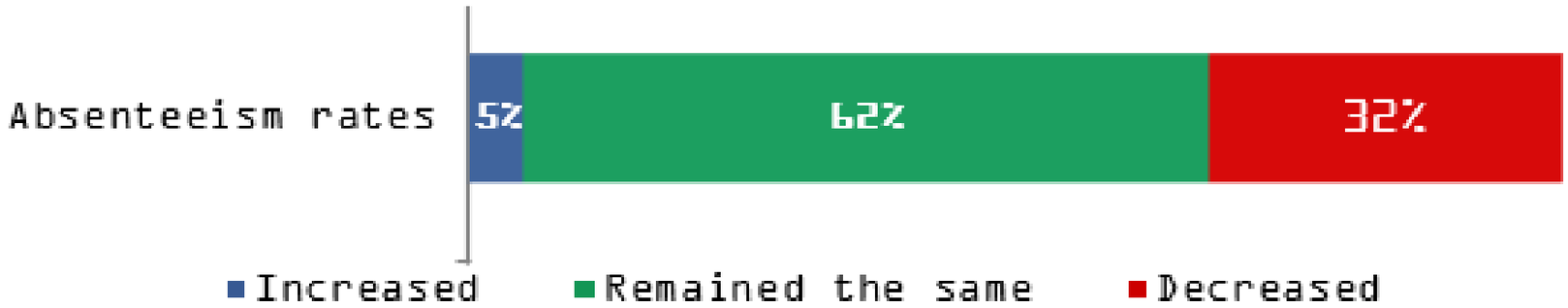
Employees save on commute costs, clothing and food

$ $

Source: Global Workplace Analytics

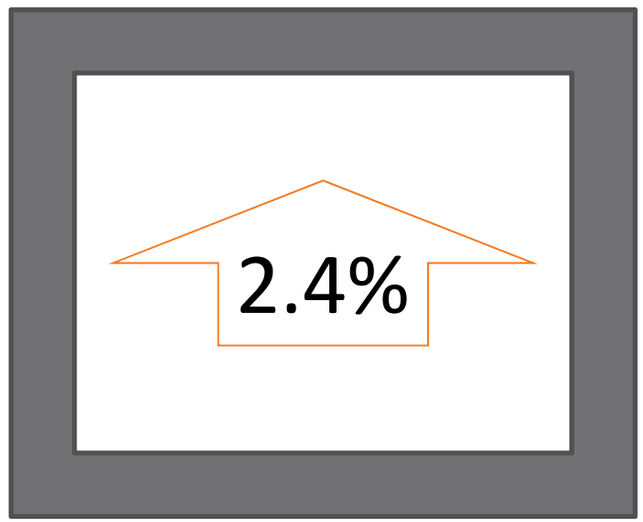
Impact on Absenteeism

Change in absenteeism for employees shifting from 100% onsite to teleworking



2014 Workplace Flexibility Survey—Overview of Flexible Work Arrangements ©SHRM 2014

Impact on Productivity



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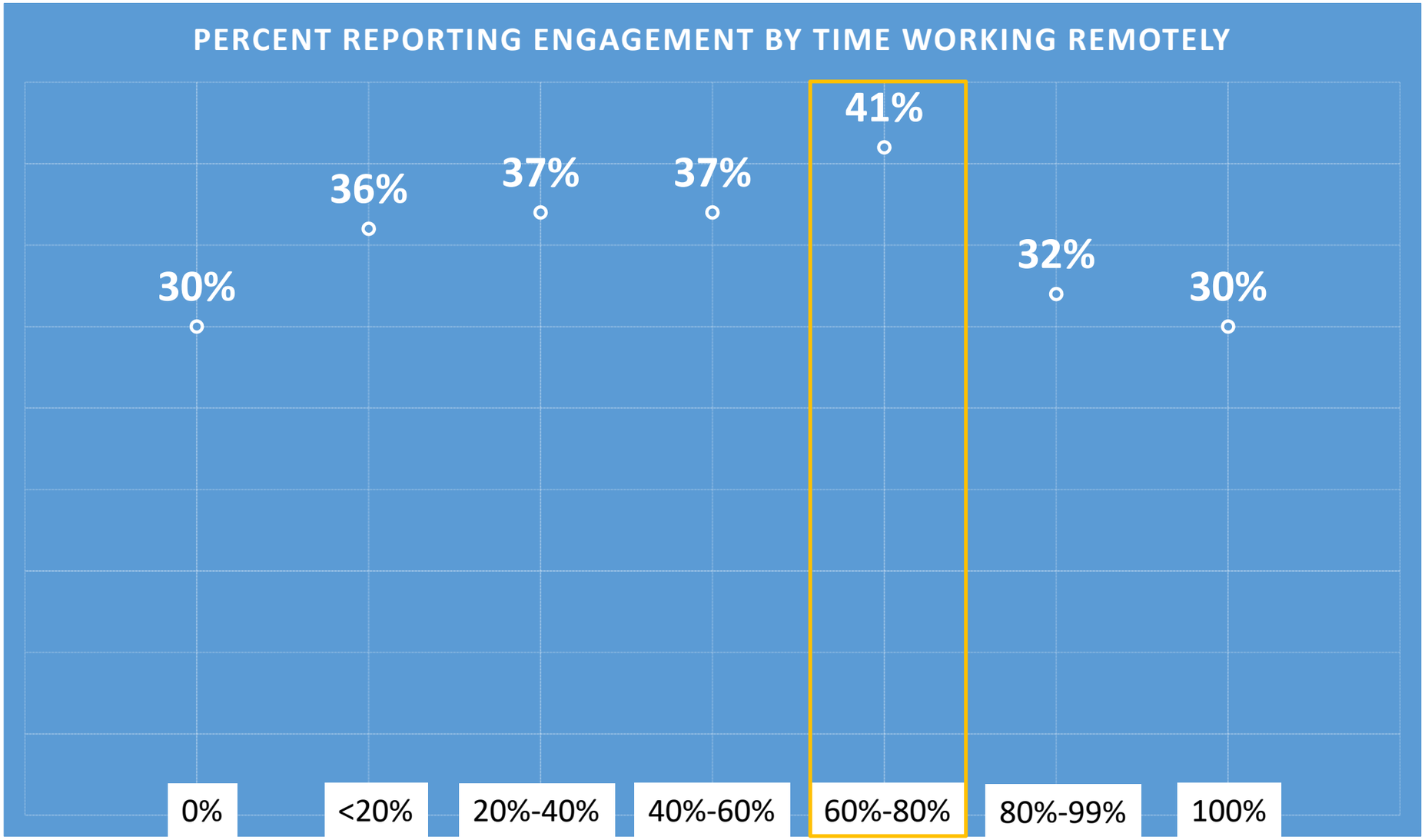
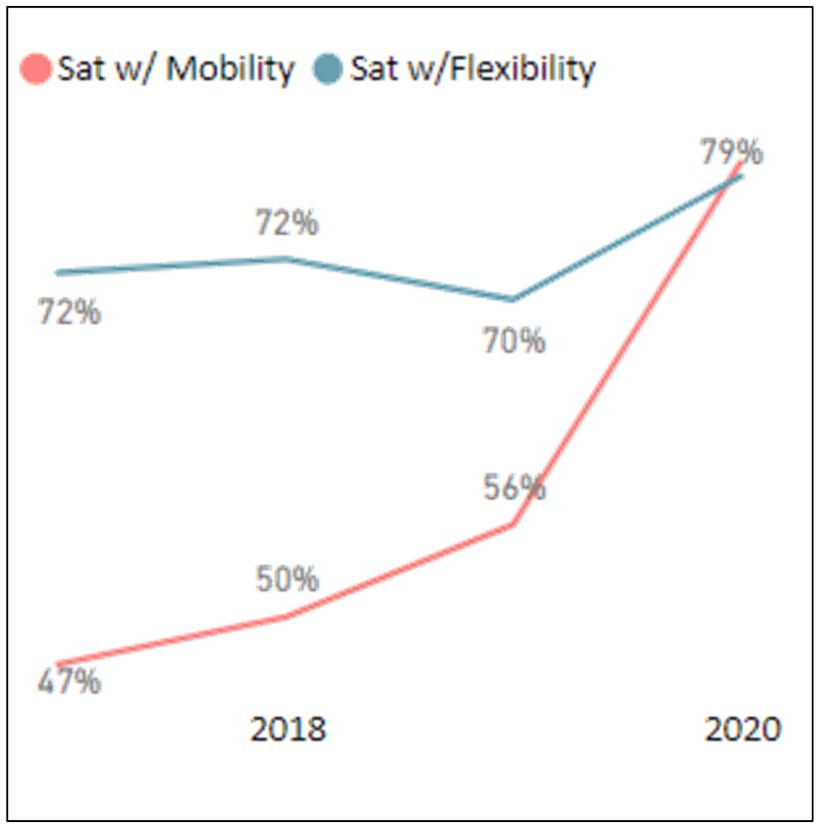
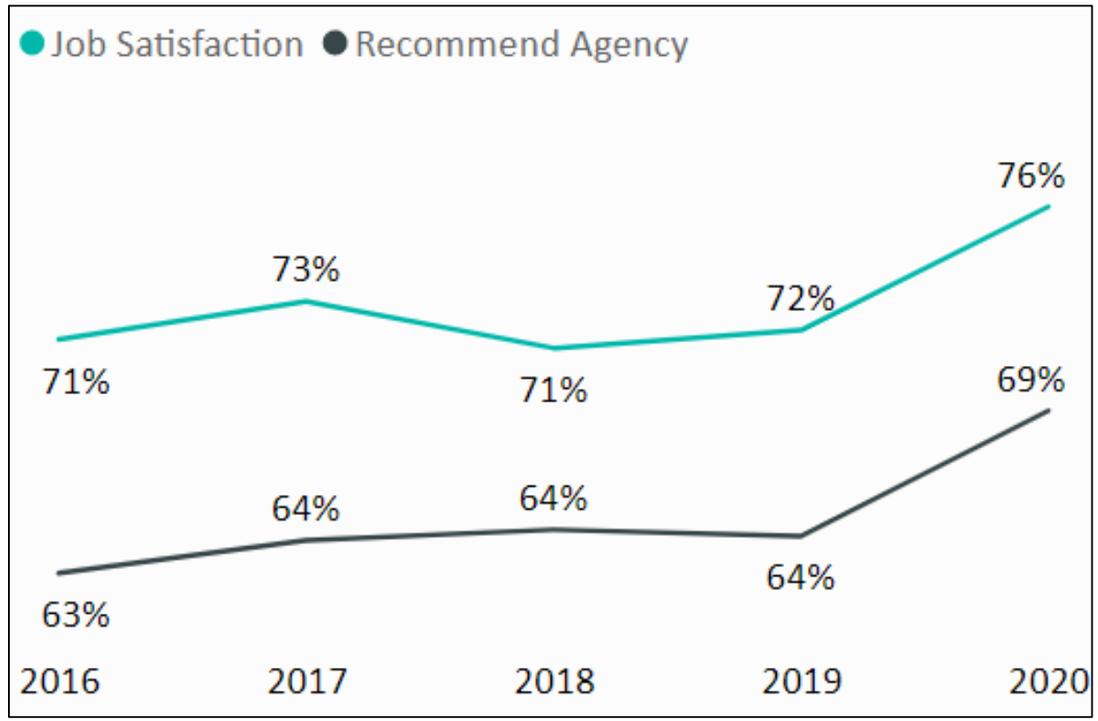


Percentage of time working remotely

https://www.gallup.com/workplace/283985/working-remotely-effective-gallup-research-says-yes.aspx

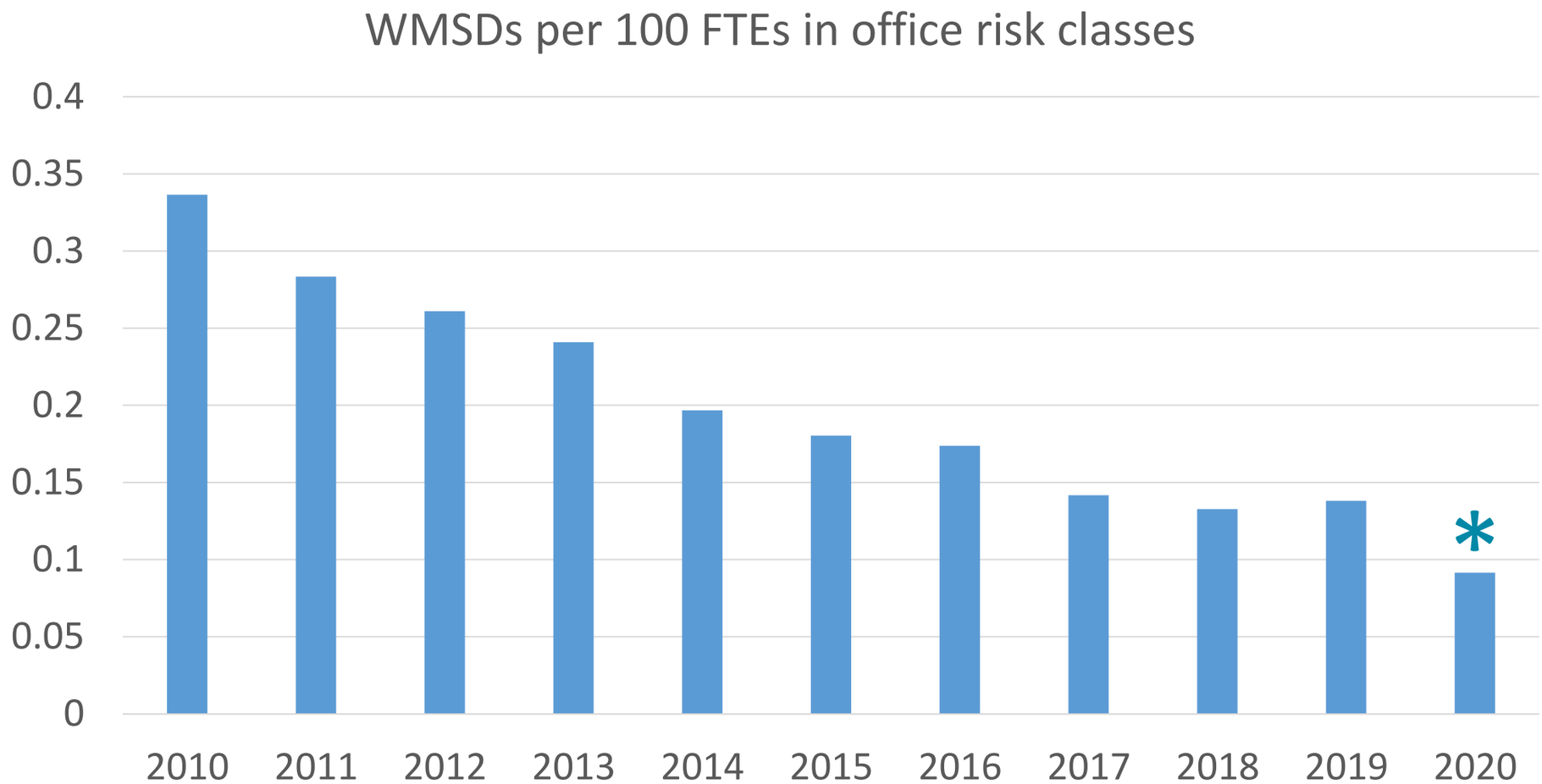
More Flexibility Results in Increased Job Satisfaction





Source: 2020 Washington State Employee Engagement Survey

Potential Impact of Reducing MSDs



Source: Washington State Workers' Compensation Data 2/1/2021

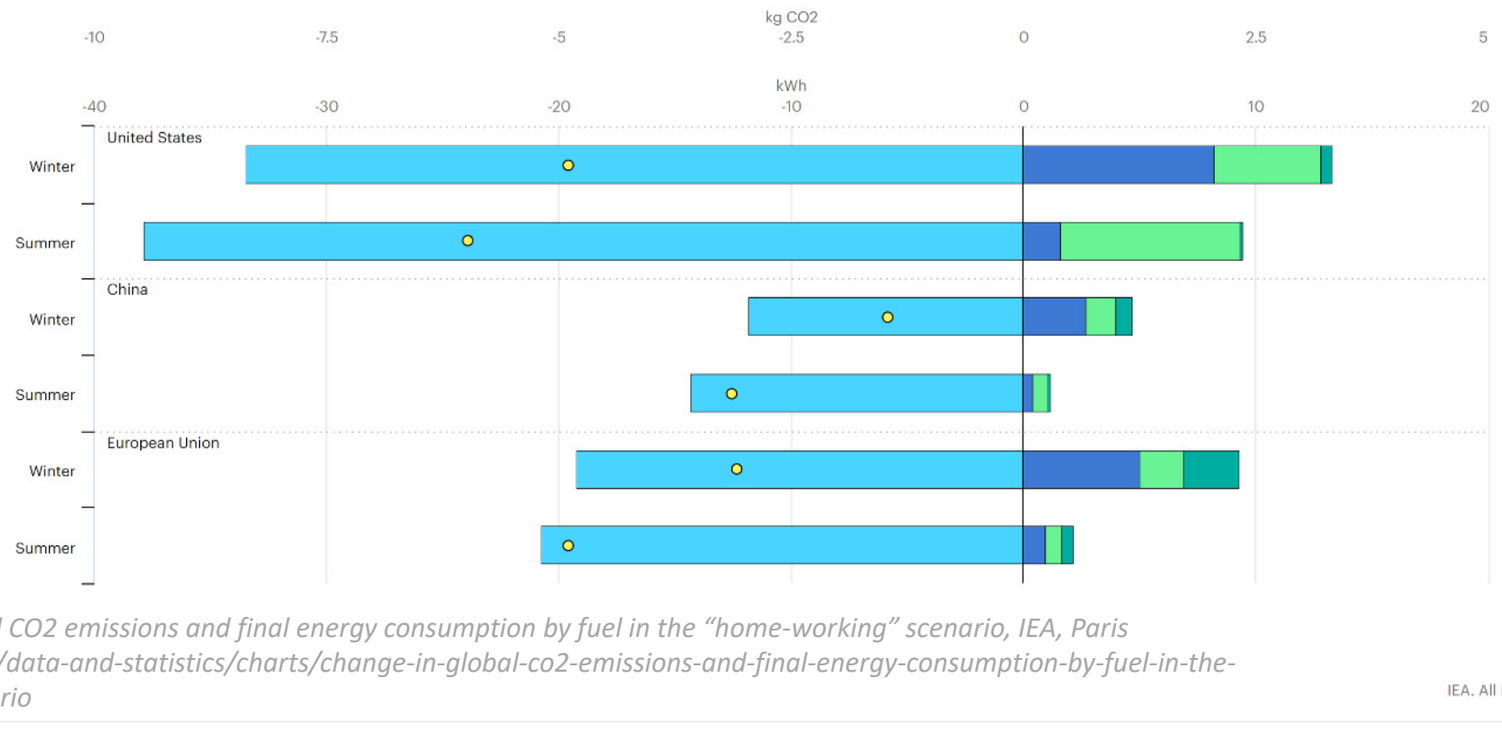
*Does the Decline in Claims in 2020 Represent Reality?

- Delayed reporting
- Reluctance to access healthcare
- Concerns about job loss
- Not wanting to impact employer's budget

Could we see a higher severity of injury claims later?

Emissions Benefit – Single Family, Single Day

- Average change in energy demand and CO2 emissions from one day of home working for a single household with a car commute

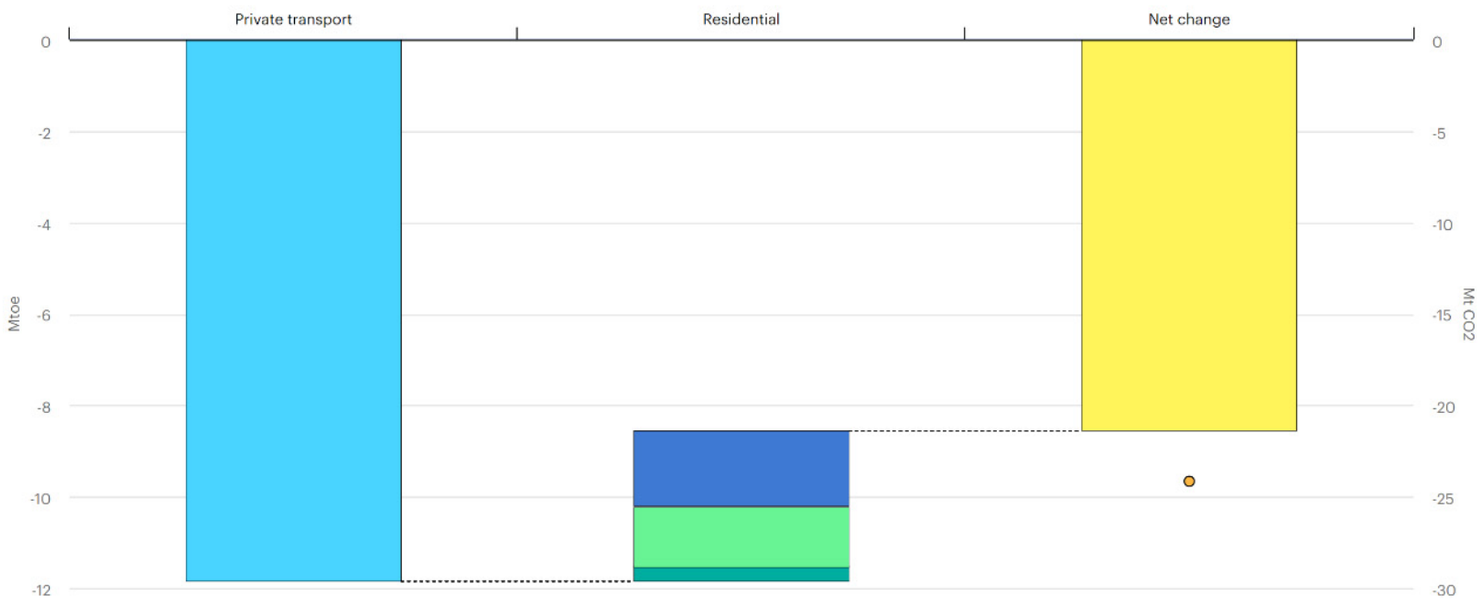


IEA, Change in global CO2 emissions and final energy consumption by fuel in the "home-working" scenario, IEA, Paris https://www.iea.org/data-and-statistics/charts/change-in-global-co2-emissions-and-final-energy-consumption-by-fuel-in-the-home-working-scenario

VelocityEHS®

Emissions Benefit – Annual, Global, 1 Day/Week

- Change in global CO2 emissions and final energy consumption by fuel in the “home-working” scenario



IEA, Change in global CO2 emissions and final energy consumption by fuel in the “home-working” scenario, IEA, Paris https://www.iea.org/data-and-statistics/charts/change-in-global-co2-emissions-and-final-energy-consumption-by-fuel-in-the-home-working-scenario

Calculating the Return on Investment (ROI)

Recommendations for Benefit-Cost Analysis

- Focus on areas with greatest potential savings
  - Reduced real estate and building operation costs
  - Productivity increases
  - Reduced turnover
- Convert numbers to yearly costs and savings per employee:

"Ergonomic equipment will cost $850 per employee in the first year."

"Reduced absenteeism is projected to save $240 per employee per year."

Savings from Reducing Real Estate Footprint May Take a While

Yearly cost to maintain occupancy:

Cost per square foot = $24

Square feet per employee = 250

Cost per employee = $6,000

Cost to relocate:

Cost per square foot = $70

Square feet per employee = 250

Cost per employee = $17,500

Payback Period:

$$\frac{\text{One time relocation cost}}{\text{Annual real estate savings}} = \frac{\$17,500}{\$6,000} = 2.9 \text{ years}$$

Sample Calculations

Increased productivity:

2.4% X 2,000 hours X average hourly labor cost

Reduced turnover:

of “extra” employees who stayed X average salary X 30%

Reduced absenteeism:

# of leave hours avoided ÷ # of employees X average hourly pay

Global Workplace Analytics

Telework Savings Calculator-Lite™

From Global Workplace Analytics' ROI Workplace Calculator Toolkit

Enter Assumptions

What is your total number of employees?	500
How many days a week, on average, will they telecommute?	2.5
How much do you expect telecommuting to:	
• Increase in productivity (%)	15%
• Reduction in office space (%)	25%
• Reduction in absenteeism (%)	31%
• Reduction in voluntary turnover (%)	10%
How many days per year are the majority of employees unable to work due to unforseen weather, traffic, or other temporary impediments?	1

The U.S. Office of Management and Budget called this calculator "comprehensive and based on solid research"

Employer Annual Savings

Productivity	$7,031,250
Continuity of operations	$432,028
Retention	$388,125
Real estate	$1,935,000
Transit subsidies	$223,080
Absenteeism	$1,305,804
Total organizational impact from above (per year)	**$11,315,286**
	$11,315

Environment/Community Annual Savings

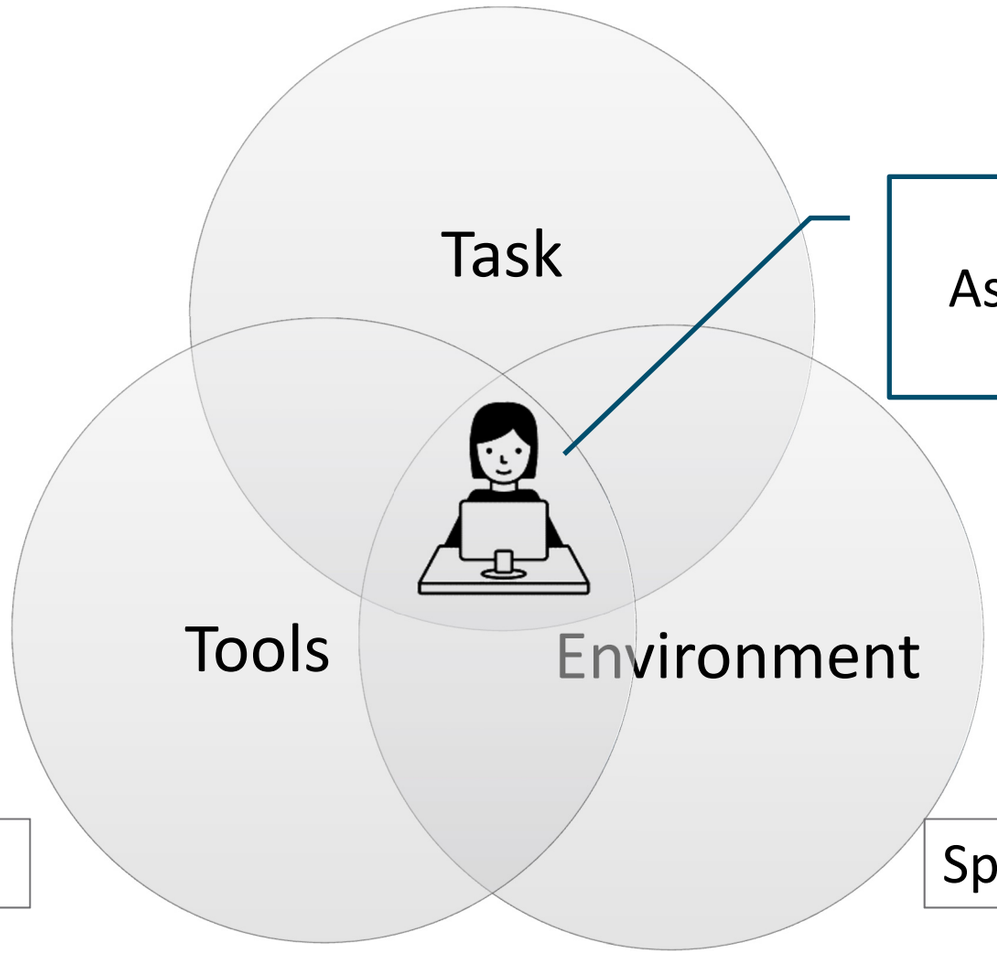
Gas savings (gallons)		98,958
Oil Saved (barrels)		5,049
Greenhouse gas equivalent in cars		159
Vehicle miles not traveled (VMnT)		2,008,856
Cost of traffic accidents	$	277,148

Employee Annual Savings

Equivalent number of workdays saved by not commuting	11.4
Travel and work-related expenses	$2,500 - $4,000

How Can Participatory Ergonomics Help?

Collaborative or Focused?



Ask the expert.

1 monitor or 2?

Space in the home?

Technology to Maximize Working from Home Benefits

Technology Solution?

New Version!

ergoTool™ Version 5

A Web-Based Management Tool
for Office Ergonomics

VelocityEHS®

Four Points of Contact®

Working from Home

Questions

Working from Home:

Challenges, Benefits, and Return on Investment (ROI)

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  - IMPACT: August 26-27
  - Sept. 1, Sept. 8

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Carbon Offsets:
Should You, or Shouldn't You?

June 10

Birds, Bats and Bees:
Using Ecology to Support Corporate Sustainability Metrics

July 22

What to Expect When Expecting an Environmental Project

August 12

2021 Conferences

Virtual

EHS Software, Innovation & Technology Showcase
May 25-27

Sustainability Impact
Aug 26-27

Women's Leadership Roundtable
July 13-15

EHS&S Management Forum

Oct 19-22
Tucson, AZ

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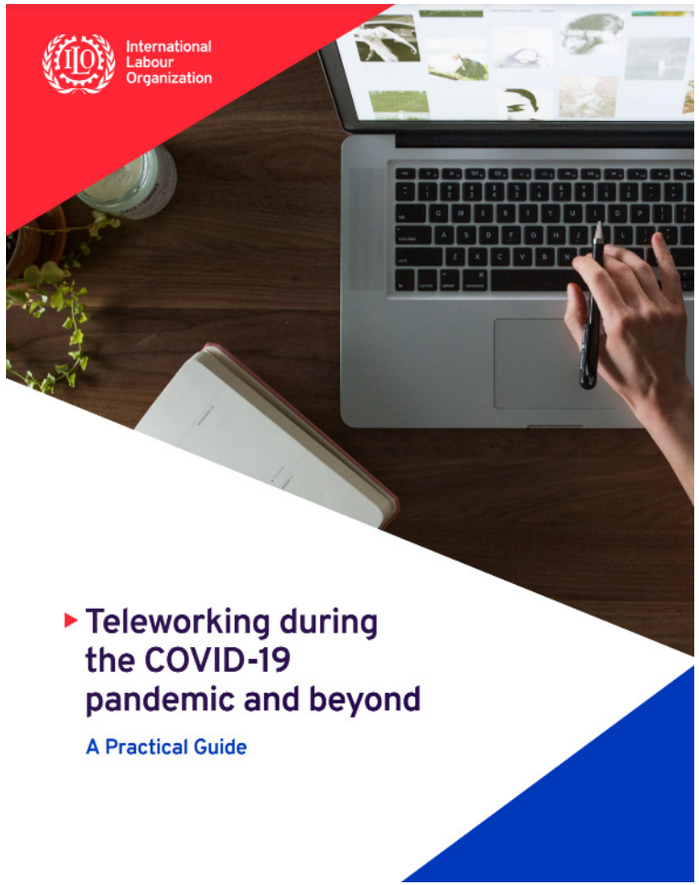
Thank you for Attending!

A recording will be available in 3-4 days. You will receive an email once it's posted to our site.

Have a safe & healthy day!

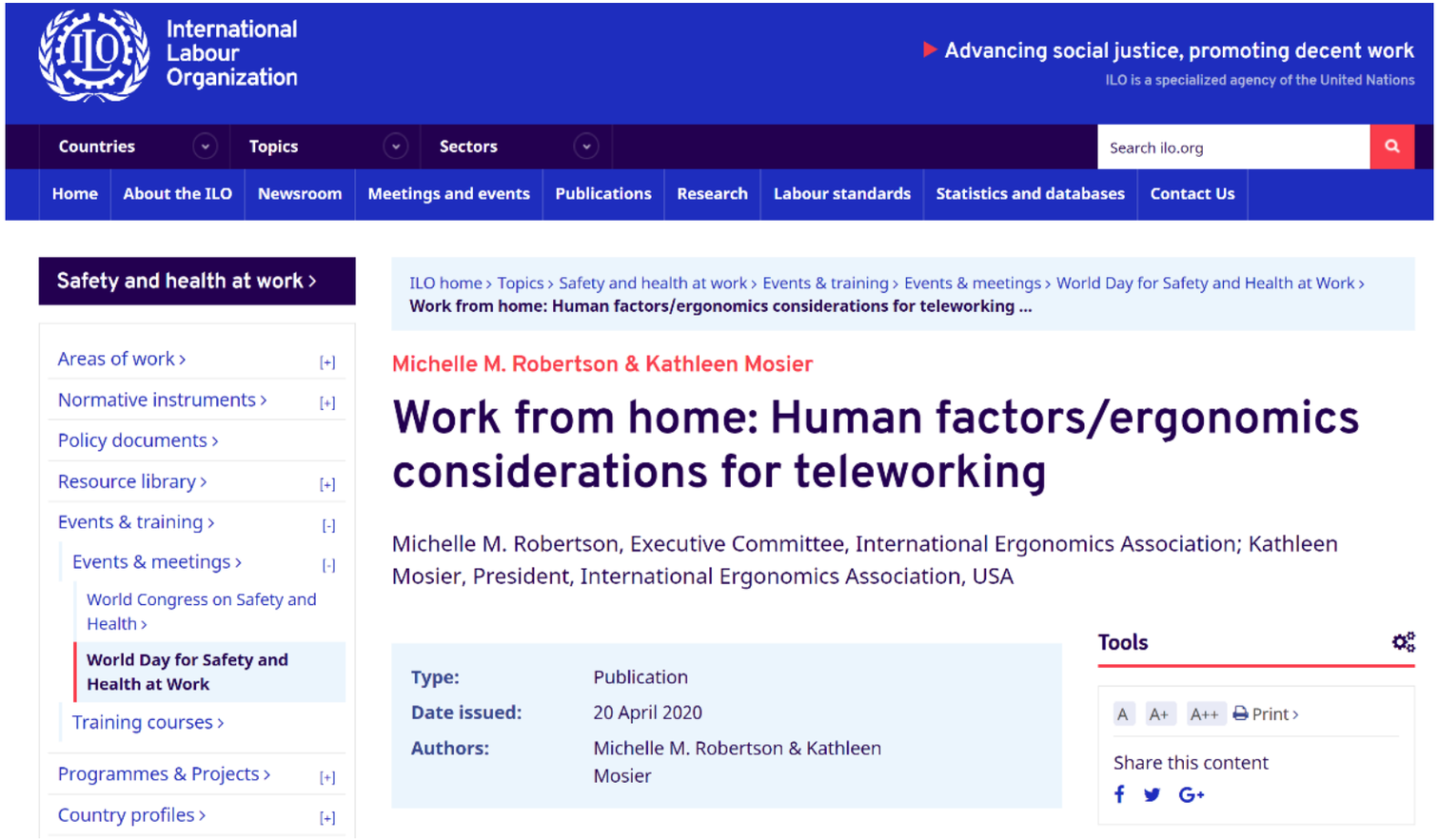
Working from Home Recommendations from ILO & IEA

ILO & IEA: Practical Recommendations



https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_751232.pdf

ILO & IEA: Practical HFE/E Recommendations



International Labour Organization

Advancing social justice, promoting decent work

ILO is a specialized agency of the United Nations

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- Events & training > [-]
  - Events & meetings > [-]
    - World Congress on Safety and Health >
    - **World Day for Safety and Health at Work**
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ILO home > Topics > Safety and health at work > Events & training > Events & meetings > World Day for Safety and Health at Work > **Work from home: Human factors/ergonomics considerations for teleworking ...**

Michelle M. Robertson & Kathleen Mosier

Work from home: Human factors/ergonomics considerations for teleworking

Michelle M. Robertson, Executive Committee, International Ergonomics Association; Kathleen Mosier, President, International Ergonomics Association, USA

Type:	Publication
Date issued:	20 April 2020
Authors:	Michelle M. Robertson & Kathleen Mosier

Tools

A A+ A++ Print >

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Michelle M. Robertson & Kathleen Mosier. Work from home: Human factors/ergonomics considerations for teleworking. 20 April 2020. International Labour Organization (ILO).

Employer Tips

- Provide the necessary tools, training, and organizational direction to ensure worker productivity, effectiveness, and safety.
- Establish and communicate clear parameters for “working from home.”
- Support workers to adjust work times around their home responsibilities and family needs.
- Provide on-line ergonomics training and resources to help workers set up and evaluate their environment.
- Provide on-line workstation evaluations through video conferencing.

Employer Tips

- Educate employees how to establish work/life balance and set boundaries.
- Provide collaborative video conferencing tools to promote a sense of belonging and to improve group cohesiveness.
- Encourage mindfulness and other stress management techniques.
- Provide clear direction for the maintenance of confidential company information and enable security measures, such as Virtual Private Networks (VPNs).
- Provide easy access to technical support.

Manager Tips

- Offer flexibility for workers who have the additional family demands.
- Encourage workers to establish a routine of work and personal activities to help them balance their family and work time.
- Communicate regularly with workers.
- Recognize individual and group performance when it’s appropriate.
- Teach workers how to use virtual meeting tools.
- Provide online “netiquette” (etiquette) training.
- Communicate the processes for reporting accidents and job-related illnesses and injuries.

Worker Tips

- Establish a routine for work and personal activities to better balance family and work time.
- Adopt healthy work-from-home habits like taking breaks each hour, moving often, and changing working posture regularly.
- Use wearable devices to schedule reminders to move, walk, and change work postures.
- Incorporate standing positions throughout the workday.
- Take an online ergonomics training course to learn how to properly set up and adjust your workstation.

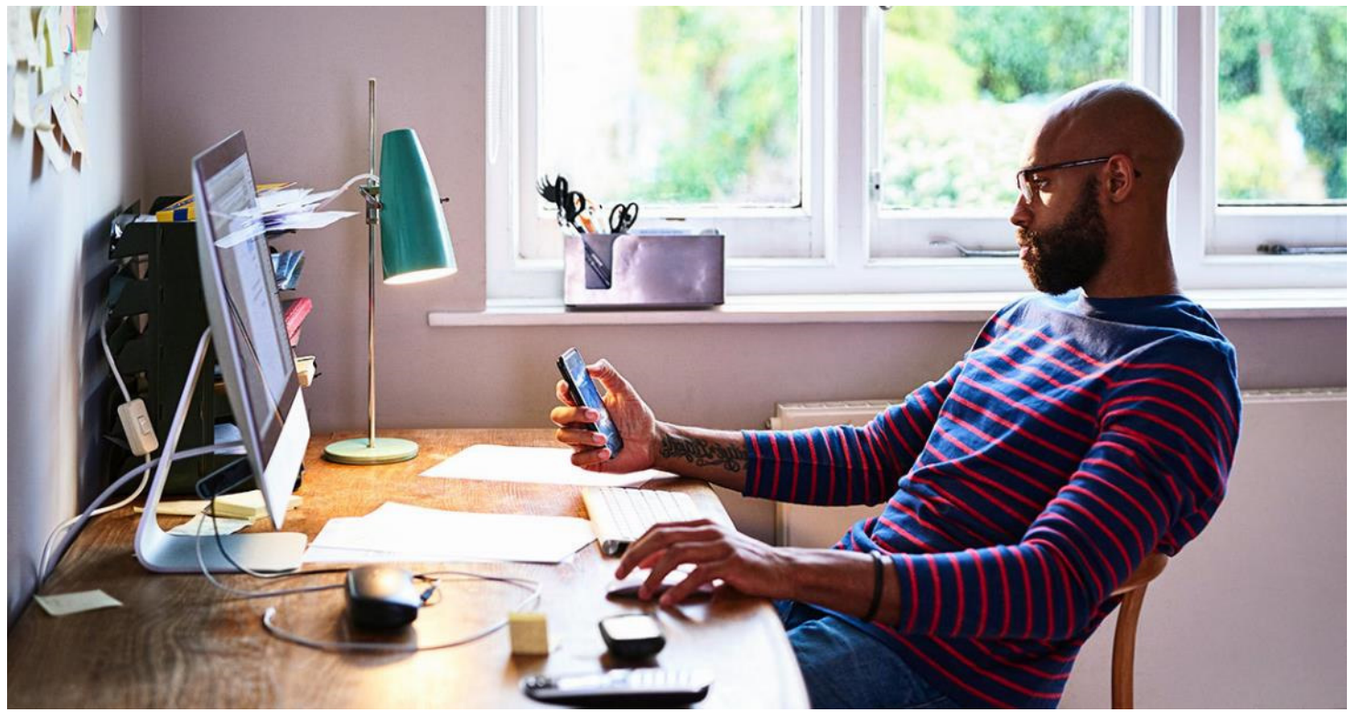
Workstation Tips

Workstation Tips

Choose a dedicated, quiet, and secure space for your workstation.

Workstation Tips

Choose a dedicated, quiet, and secure space for your workstation.



Workstation Tips

Choose a dedicated, quiet, and secure space for your workstation.

Workstation Tips

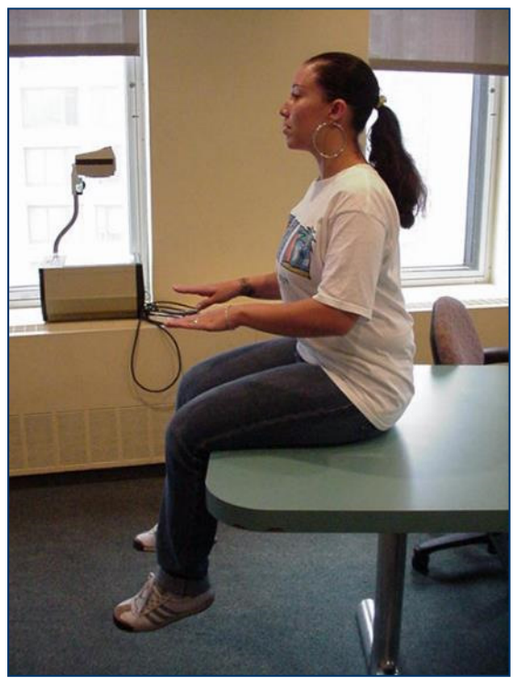
Make sure the area is at least 6 feet by 6 feet (or two square meters) to accommodate most work activities, equipment, and furniture.

Workstation Tips

Make sure the work surface is about 26 inches (or 66 centimeters) high and at least 23 inches (or 60 centimeters) deep.

Reminder - ABC Process

Sit on a sturdy flat surface with legs dangling (e.g. tabletop), or sit on a chair raised to the highest height



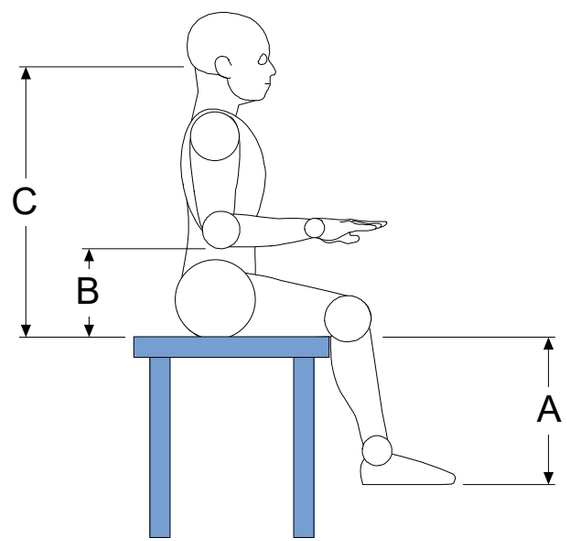
Reminder – ABC Process

Measure these distances:

A - from the bottom of the shoe to the crease behind the knee

B - from the tabletop to the tip of the employee's elbow

C - from the tabletop to the center of the eyes

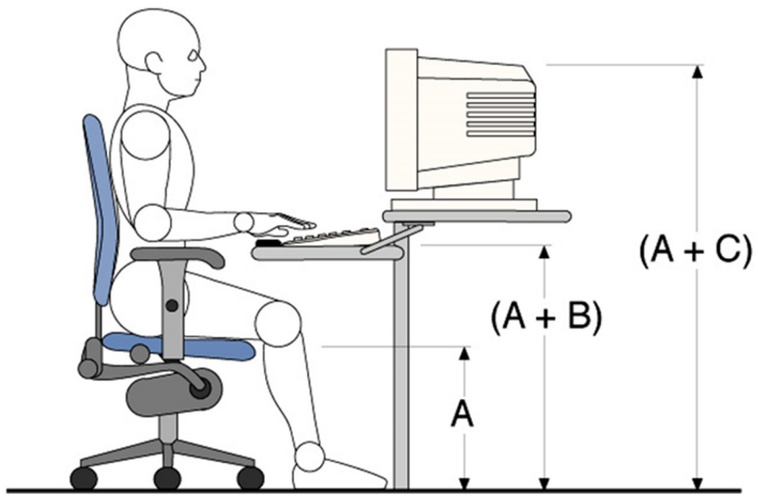


Reminder – ABC Process

Chair height = A

Keyboard height = A +B

Monitor height = A + C



Workstation Tips

Use an ergonomically designed chair

- Adjustable Seat Pan: Height, Depth, Tilt
- Adjustable Backrest: Height, Tilt, Tension
- Adjustable Arm Rests: Height, Width, Swivel, Ample padding, Long enough to avoid contact stress
- Lower Back Support
- Rounded Front Seat Pan Edge

Workstation Tips

Use a full-size external monitor if using a laptop.

- Not too big though
- Proper monitor size equation:
  - *Worksurface depth ≥ diagonal monitor dimension*
- (For example, a diagonal monitor dimensions of 20" should never be closer than 20" to your eyes)

Workstation Tips

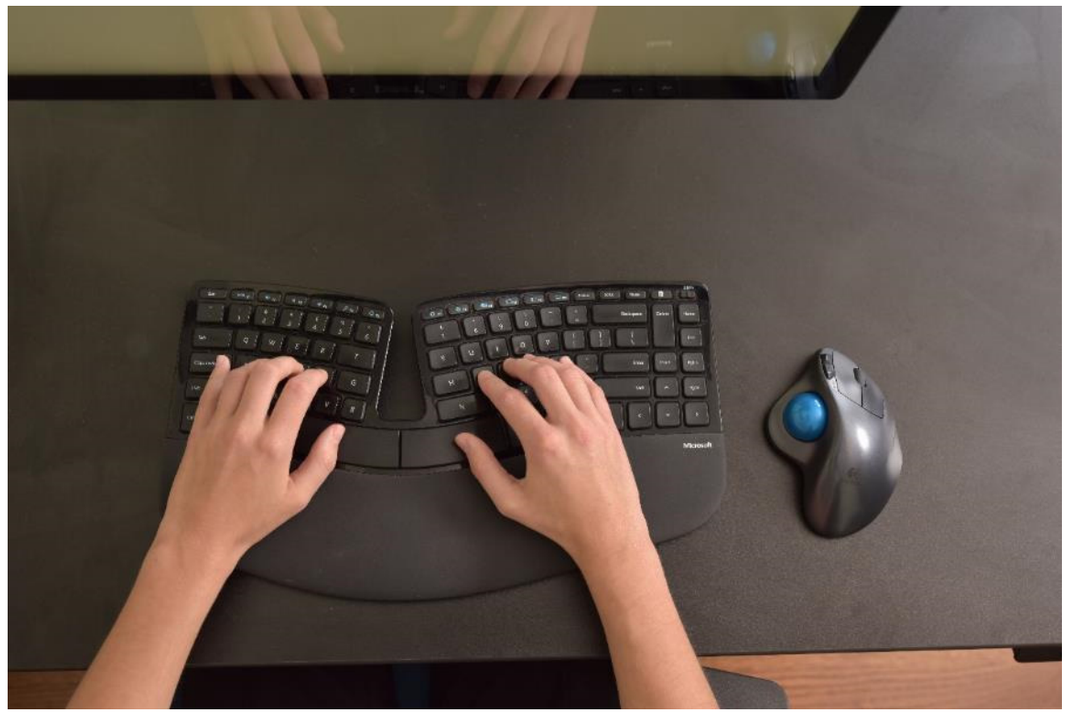
Use a full-size external monitor if using a laptop.

- Top of the screen at or slightly below eye level
- Located about an arm's reach away
- Centered in front of your body
- Free of glare
- Use corrective lenses (bifocal, trifocal, or progressive)

Workstation Tips

Use an external keyboard if using a laptop.

- Positioned directly in front of you
- Thin keyboard
- No numerical keypad
- Keyboard and mouse at same height
- Wrist rest not required



Workstation Tips

Use an external mouse if using a laptop.

- Positioned next to keyboard
- Vertical preferred to horizontal
- Sized for hand
- Right or left hand
- Keyboard and mouse at same height

Workstation Tips

Use a surge protector and a docking station

- Surge protector, not power strip
- More joules (>4,000 Joules)
- Warranty
- 6 or more outlets
- Enough spacing for large plugs
- USB connection with 2 amps
- Replace after serious electrical event

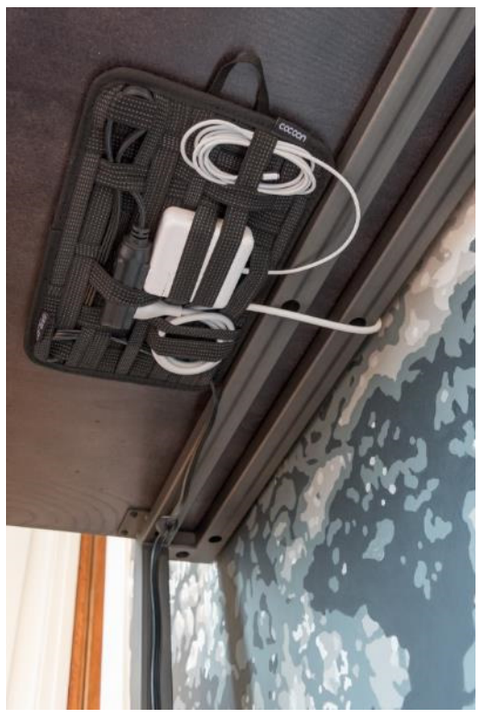
Workstation Tips

Keep cable and electrical cords and wires tucked away to prevent tripping and fall hazards.

- Cable organizers
- Secure cords table legs
- Disguise or hide cords
- Store cord in boxes

Workstation Tips

Keep cable and electrical cords and wires tucked away to prevent tripping and fall hazards.



Workstation Tips

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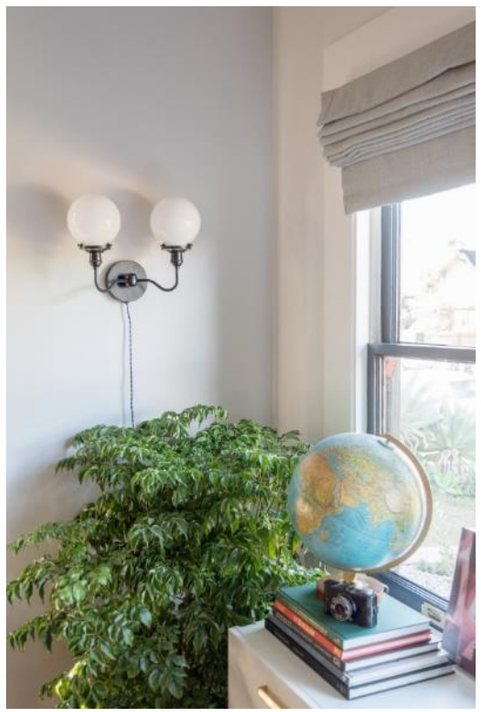
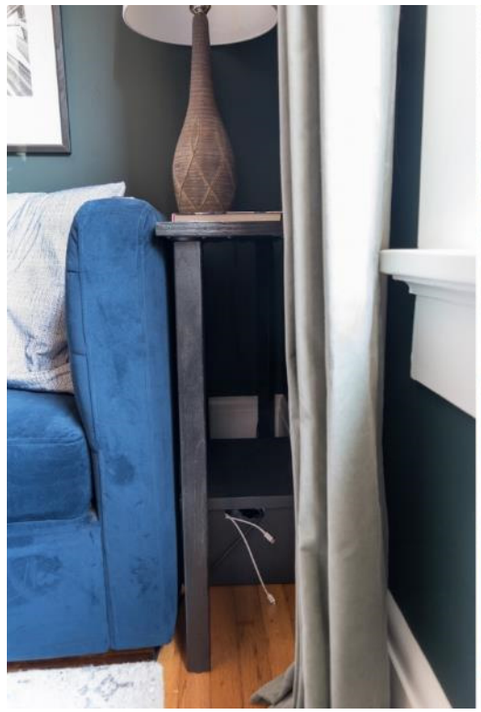
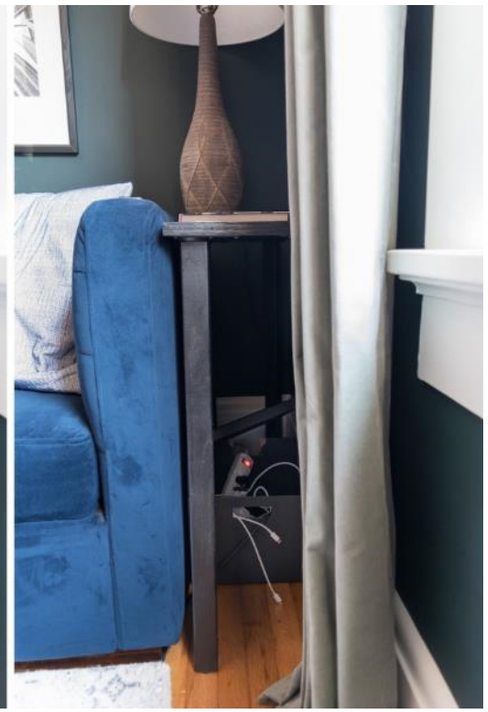






Workstation Tips

Make sure you have Wi-Fi speed and capability to match your work requirements.

- Internet speed:
  - Minimum: 25 Mbps
  - Good: 50 Mbps
  - Recommended: 100+ Mbps
- Restart router
- Upgrade router
- Reposition router
- Embrace ethernet

Workstation Tips

Have access to a mobile phone, headphones, and speakers.

Workstation Tips

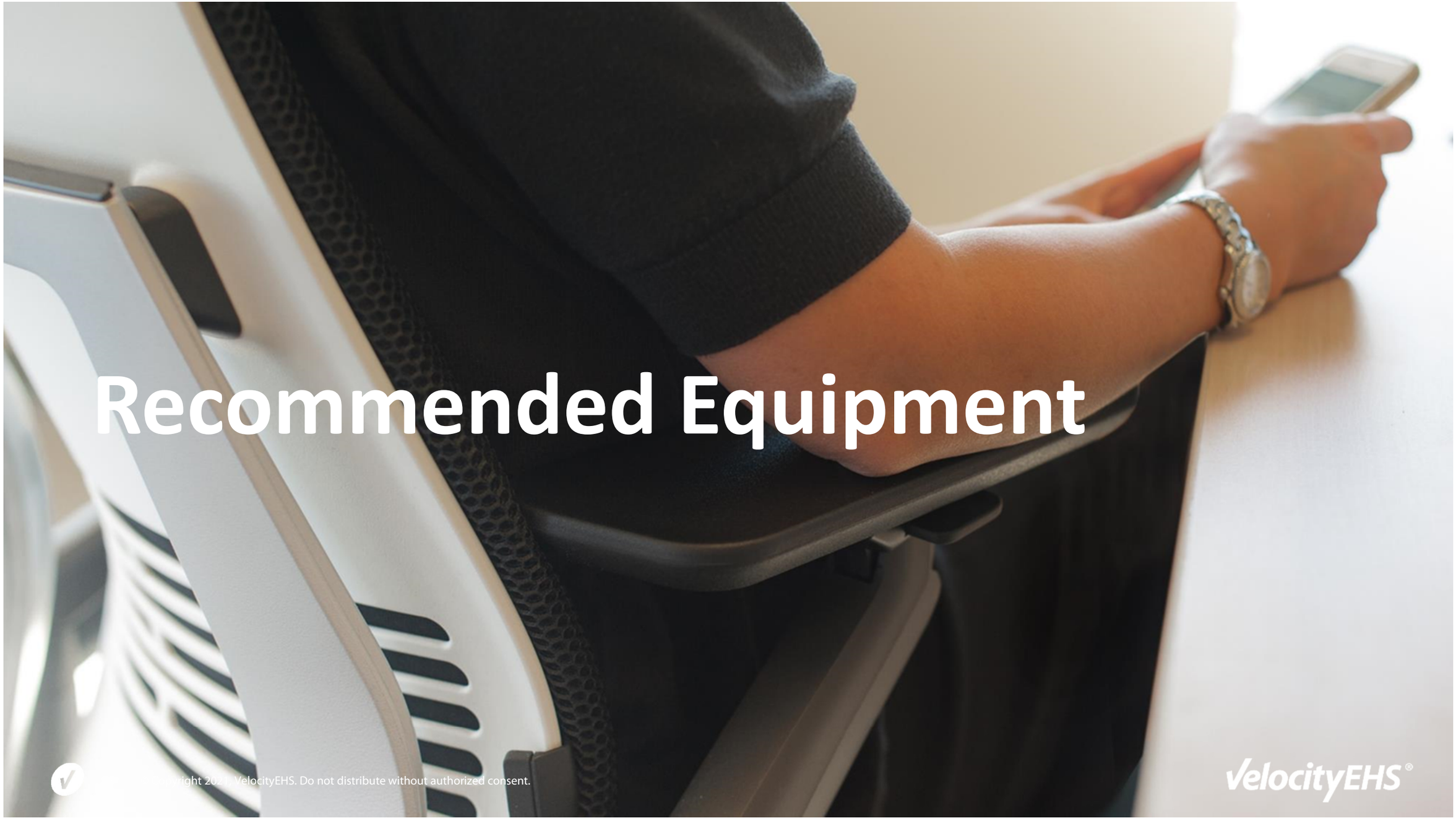
Install proper overhead and task lighting

- Lighting:
  - Minimum: 200 lux
  - Recommended: 500 lux
- Task lighting positioned over work, not keyboard
- Avoid reflective worksurfaces
- Avoid window glare

Workstation Tips

Use a headset or noise-cancelling headphones to control external noise

- Noise cancelling efficacy of >70%
- Sound quality
- Battery life > 10 hours (in wireless models)
- Comfort



Recommended Equipment

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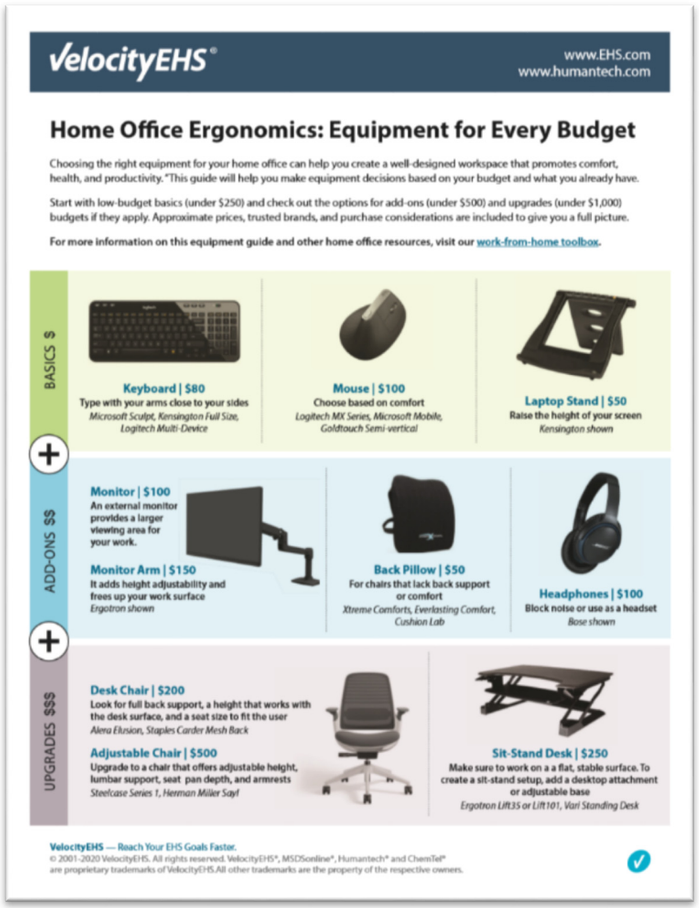
Recommended Equipment



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Home Office Ergonomics: Equipment for Every Budget

Choosing the right equipment for your home office can help you create a well-designed workspace that promotes comfort, health, and productivity.*This guide will help you make equipment decisions based on your budget and what you already have.

Start with low-budget basics (under $250) and check out the options for add-ons (under $500) and upgrades (under $1,000) budgets if they apply. Approximate prices, trusted brands, and purchase considerations are included to give you a full picture.

For more information on this equipment guide and other home office resources, visit our work-from-home toolbox.

BASICS $

Keyboard | $80
Type with your arms close to your sides
Microsoft Sculpt, Kensington Full Size, Logitech Multi-Device

Mouse | $100
Choose based on comfort
Logitech MX Series, Microsoft Mobile, Goldtouch Semi-vertical

Laptop Stand | $50
Raise the height of your screen
Kensington shown

+

ADD-ONS $$

Monitor | $100
An external monitor provides a larger viewing area for your work.

Monitor Arm | $150
It adds height adjustability and frees up your work surface
Ergotron shown

Back Pillow | $50
For chairs that lack back support or comfort
Xtreme Comforts, Everlasting Comfort, Cushion Lab

Headphones | $100
Block noise or use as a headset
Bose shown

+

UPGRADES $$$

Desk Chair | $200
Look for full back support, a height that works with the desk surface, and a seat size to fit the user
Alera Elusion, Staples Carder Mesh Back

Adjustable Chair | $500
Upgrade to a chair that offers adjustable height, lumbar support, seat pan depth, and armrests
Steelcase Series 1, Herman Miller Sayl

Sit-Stand Desk | $250
Make sure to work on a a flat, stable surface. To create a sit-stand setup, add a desktop attachment or adjustable base
Ergotron Lift35 or Lift101, Vari Standing Desk

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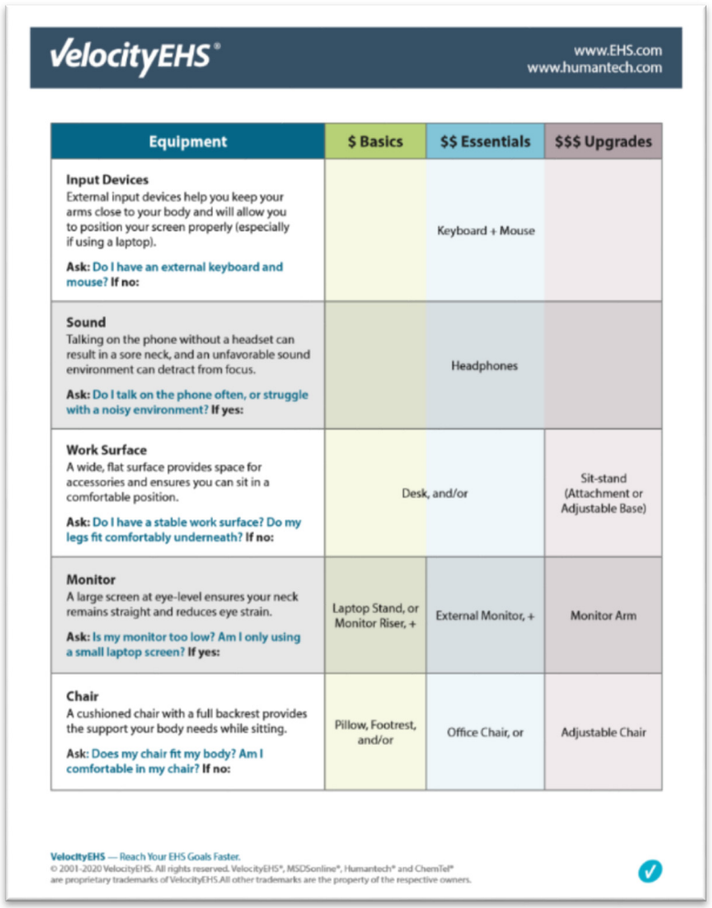

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Equipment	$ Basics	$$ Essentials	$$$ Upgrades
Input Devices External input devices help you keep your arms close to your body and will allow you to position your screen properly (especially if using a laptop). **Ask: Do I have an external keyboard and mouse? If no:**		Keyboard + Mouse	
Sound Talking on the phone without a headset can result in a sore neck, and an unfavorable sound environment can detract from focus. **Ask: Do I talk on the phone often, or struggle with a noisy environment? If yes:**		Headphones	
Work Surface A wide, flat surface provides space for accessories and ensures you can sit in a comfortable position. **Ask: Do I have a stable work surface? Do my legs fit comfortably underneath? If no:**	Desk, and/or		Sit-stand (Attachment or Adjustable Base)
Monitor A large screen at eye-level ensures your neck remains straight and reduces eye strain. **Ask: Is my monitor too low? Am I only using a small laptop screen? If yes:**	Laptop Stand, or Monitor Riser, +	External Monitor, +	Monitor Arm
Chair A cushioned chair with a full backrest provides the support your body needs while sitting. **Ask: Does my chair fit my body? Am I comfortable in my chair? If no:**	Pillow, Footrest, and/or	Office Chair, or	Adjustable Chair

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https://www.humantech.com/special/2020/Info-Sheet_Home-Office-For-Every-Budget.pdf

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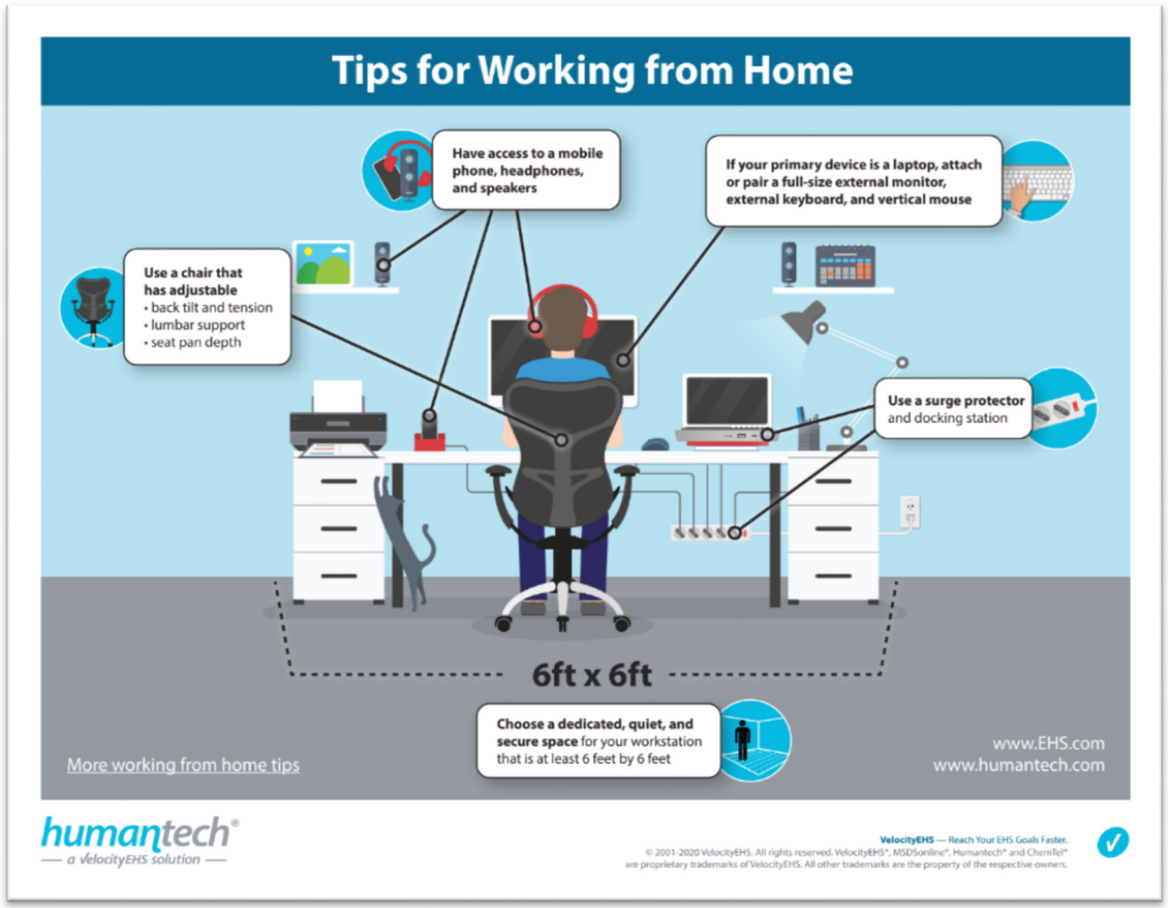
Resources: Tips for Working from Home

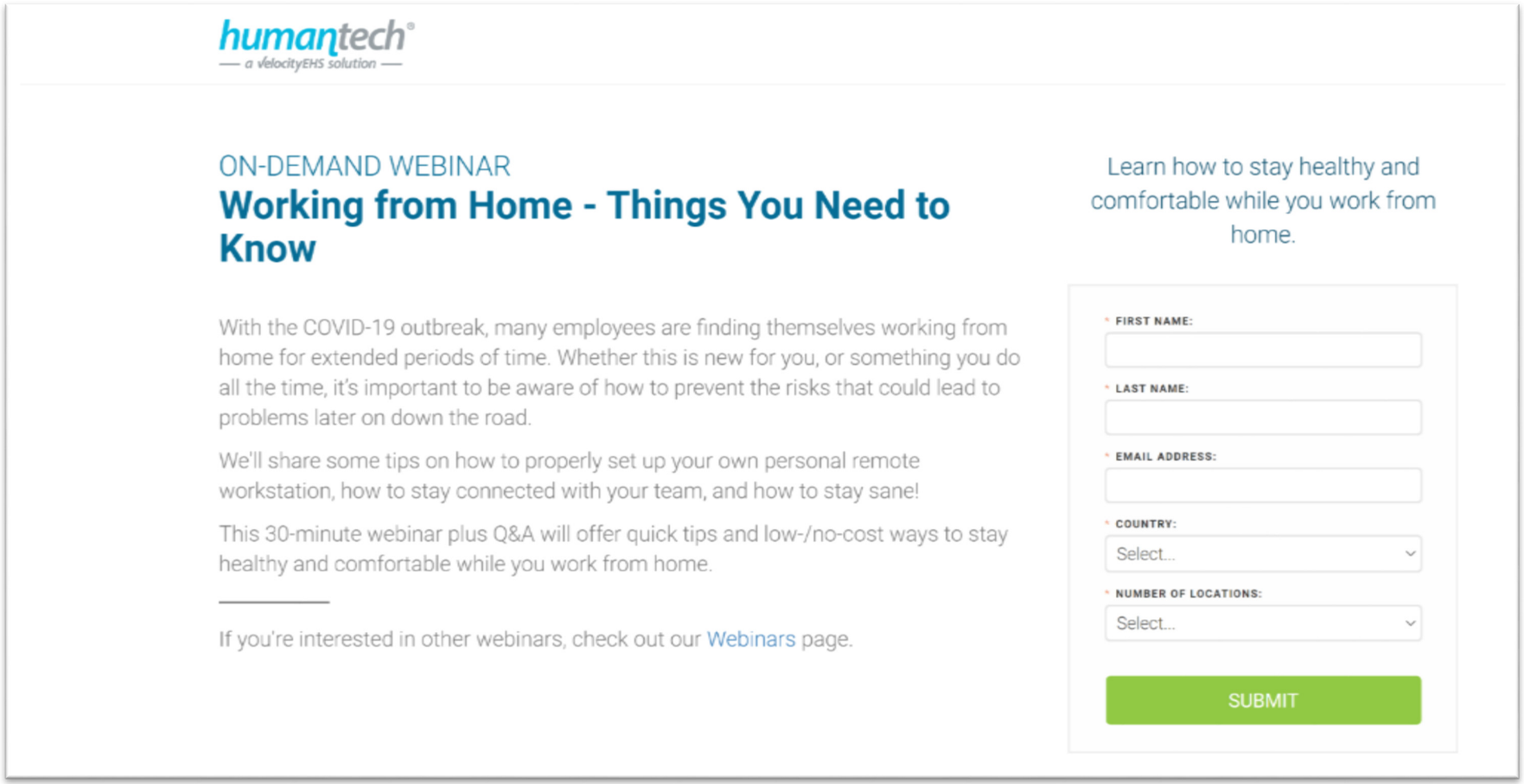


https://www.humantech.com/special/resources/HT_Info-Sheet_Ergo-TIPS_Working-From-Home.pdf

Resources: 10 Things You Should Know

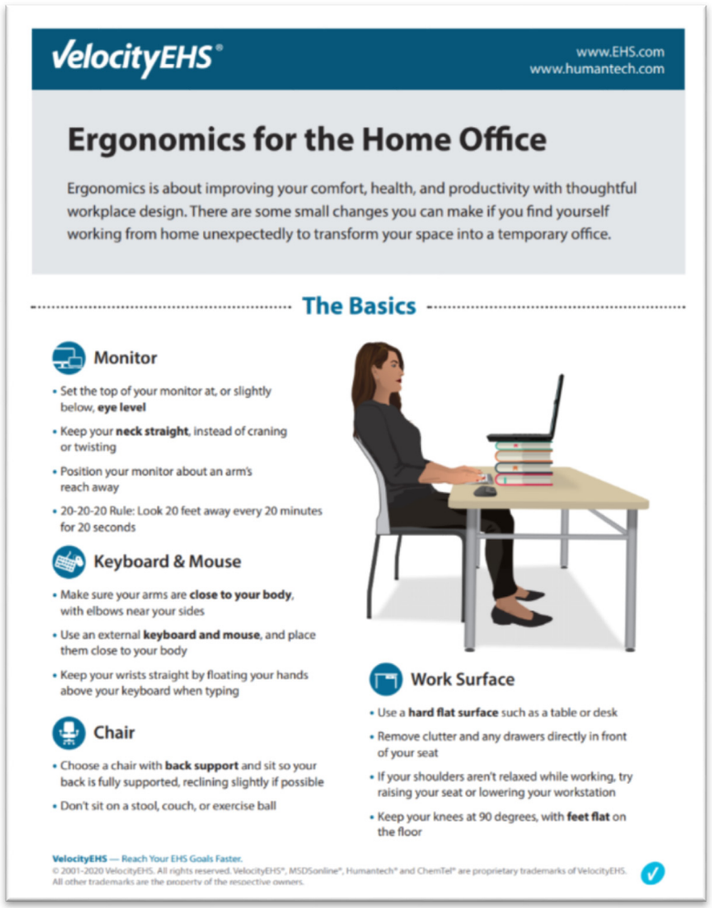
https://www.humantech.com/special/resources/Infographic_10-data-pts_Ergonomics_Office_Finalv2.pdf

Resources: Working from Home Webinar



https://info.humantech.com/Working-from-Home_leh-Registration.html

Resources: Ergonomics for the Home Office



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Ergonomics for the Home Office

Ergonomics is about improving your comfort, health, and productivity with thoughtful workplace design. There are some small changes you can make if you find yourself working from home unexpectedly to transform your space into a temporary office.

The Basics

Monitor

- Set the top of your monitor at, or slightly below, **eye level**
- Keep your **neck straight**, instead of craning or twisting
- Position your monitor about an arm's reach away
- 20-20-20 Rule: Look 20 feet away every 20 minutes for 20 seconds

Keyboard & Mouse

- Make sure your arms are **close to your body**, with elbows near your sides
- Use an external **keyboard and mouse**, and place them close to your body
- Keep your wrists straight by floating your hands above your keyboard when typing

Chair

- Choose a chair with **back support** and sit so your back is fully supported, reclining slightly if possible
- Don't sit on a stool, couch, or exercise ball

Work Surface

- Use a **hard flat surface** such as a table or desk
- Remove clutter and any drawers directly in front of your seat
- If your shoulders aren't relaxed while working, try raising your seat or lowering your workstation
- Keep your knees at 90 degrees, with **feet flat** on the floor

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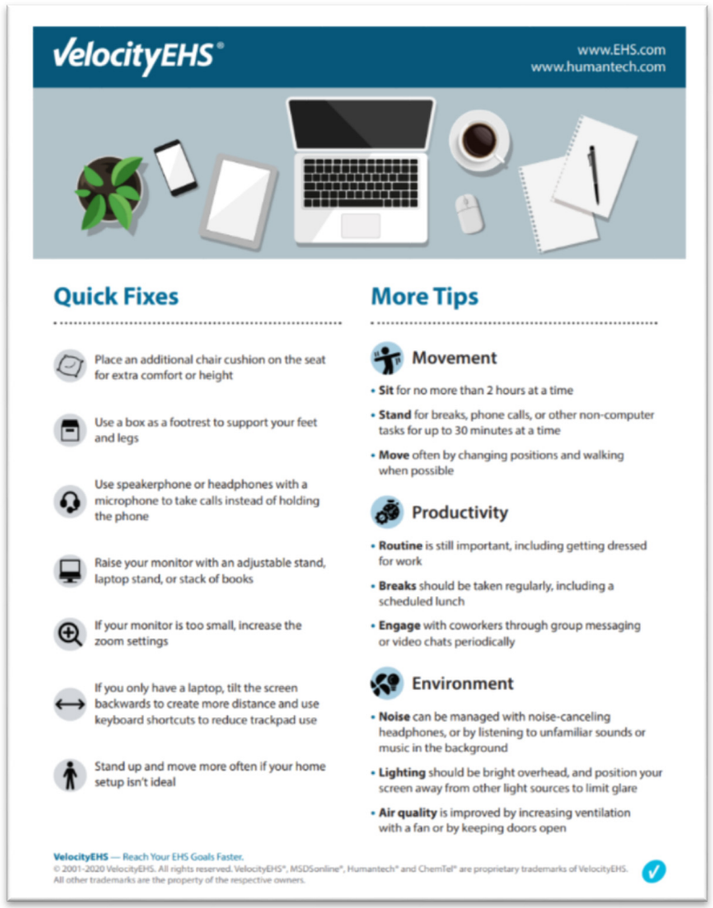

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Quick Fixes

- Place an additional chair cushion on the seat for extra comfort or height
- Use a box as a footrest to support your feet and legs
- Use speakerphone or headphones with a microphone to take calls instead of holding the phone
- Raise your monitor with an adjustable stand, laptop stand, or stack of books
- If your monitor is too small, increase the zoom settings
- If you only have a laptop, tilt the screen backwards to create more distance and use keyboard shortcuts to reduce trackpad use
- Stand up and move more often if your home setup isn't ideal

More Tips

Movement

- **Sit** for no more than 2 hours at a time
- **Stand** for breaks, phone calls, or other non-computer tasks for up to 30 minutes at a time
- **Move** often by changing positions and walking when possible

Productivity

- **Routine** is still important, including getting dressed for work
- **Breaks** should be taken regularly, including a scheduled lunch
- **Engage** with coworkers through group messaging or video chats periodically

Environment

- **Noise** can be managed with noise-canceling headphones, or by listening to unfamiliar sounds or music in the background
- **Lighting** should be bright overhead, and position your screen away from other light sources to limit glare
- **Air quality** is improved by increasing ventilation with a fan or by keeping doors open

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https://www.humantech.com/special/2020/Ergonomics_Home_Office_Humantech.pdf

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