

Whatever Happened to Carpal Tunnel Syndrome?

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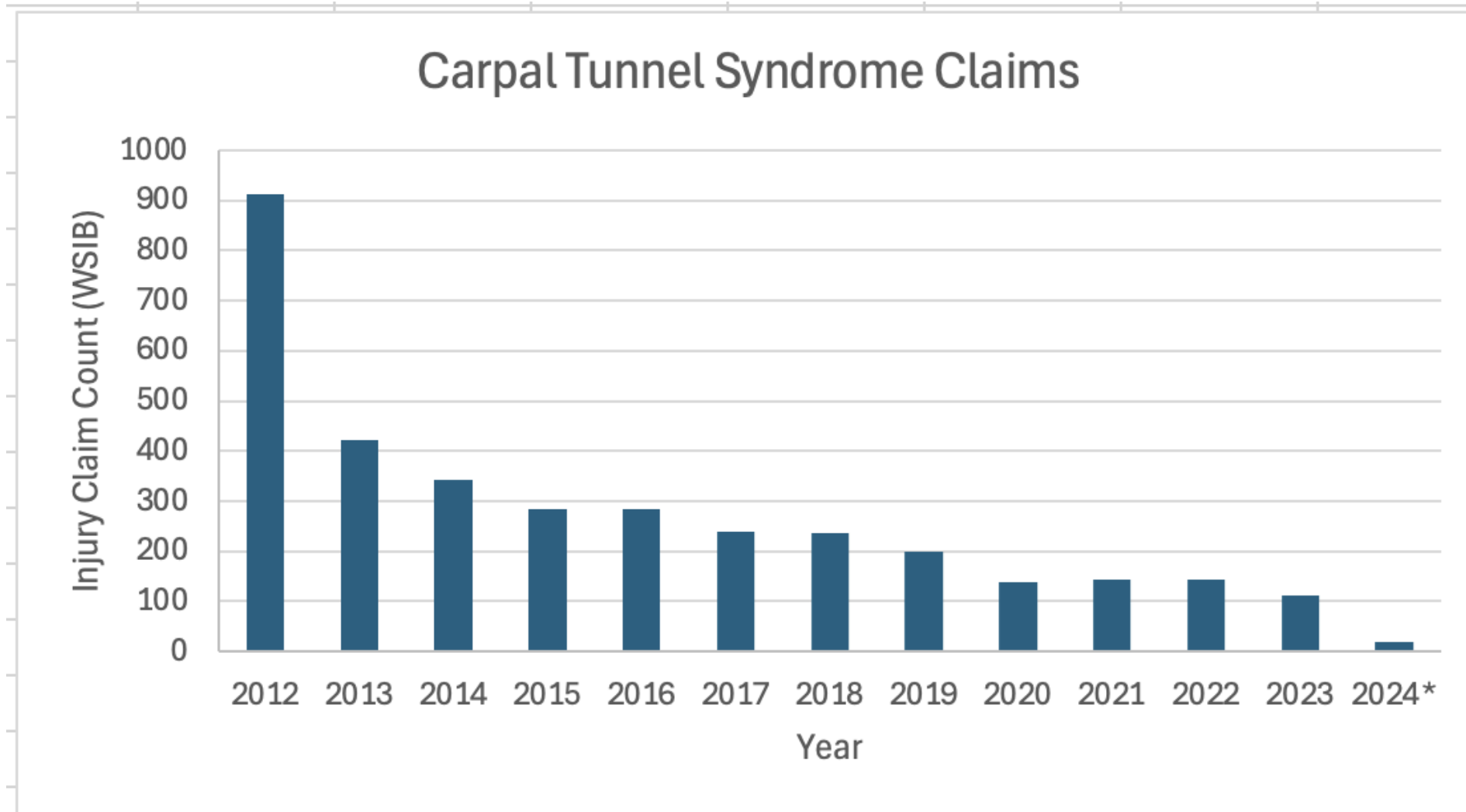
TECHNOLOGY

WHATEVER HAPPENED TO CARPAL TUNNEL SYNDROME?

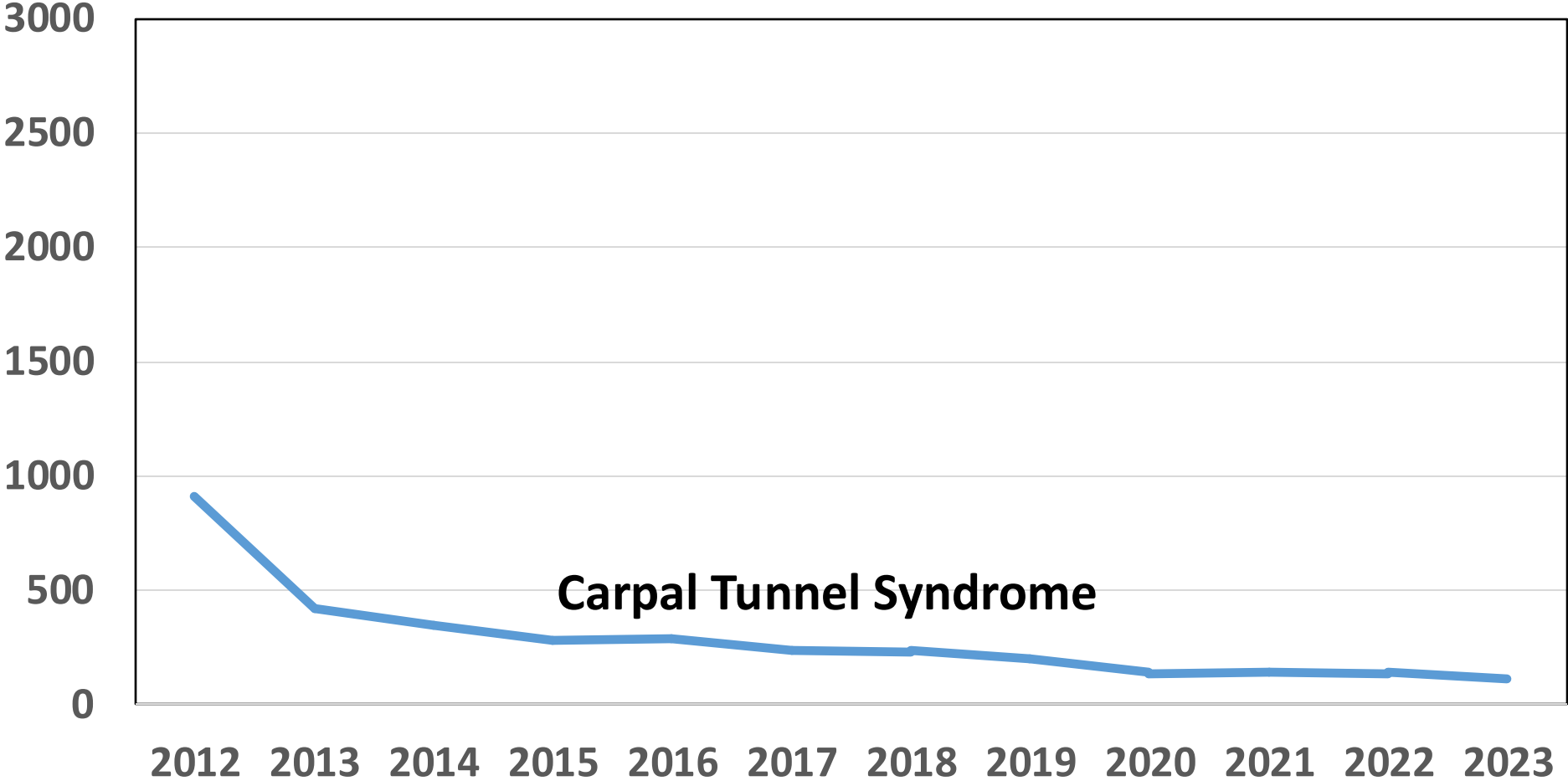
A national plague of workplace injuries was once a media
obsession. Now it's all but forgotten.

By Benjamin Ryan

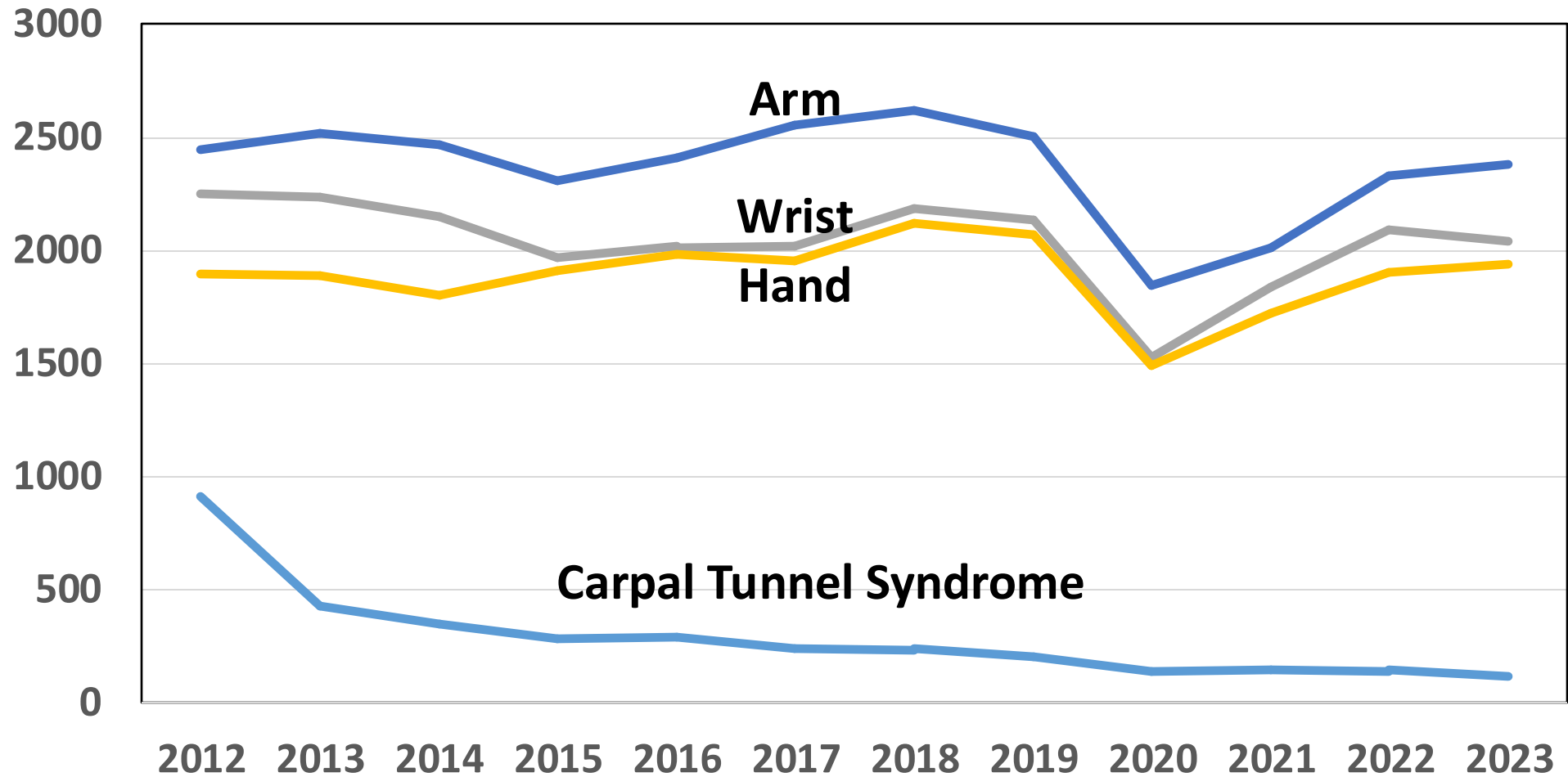
Ontario CTS Work-Related Injury Claims



Ontario Work-Related Injury Claims 2012-2023

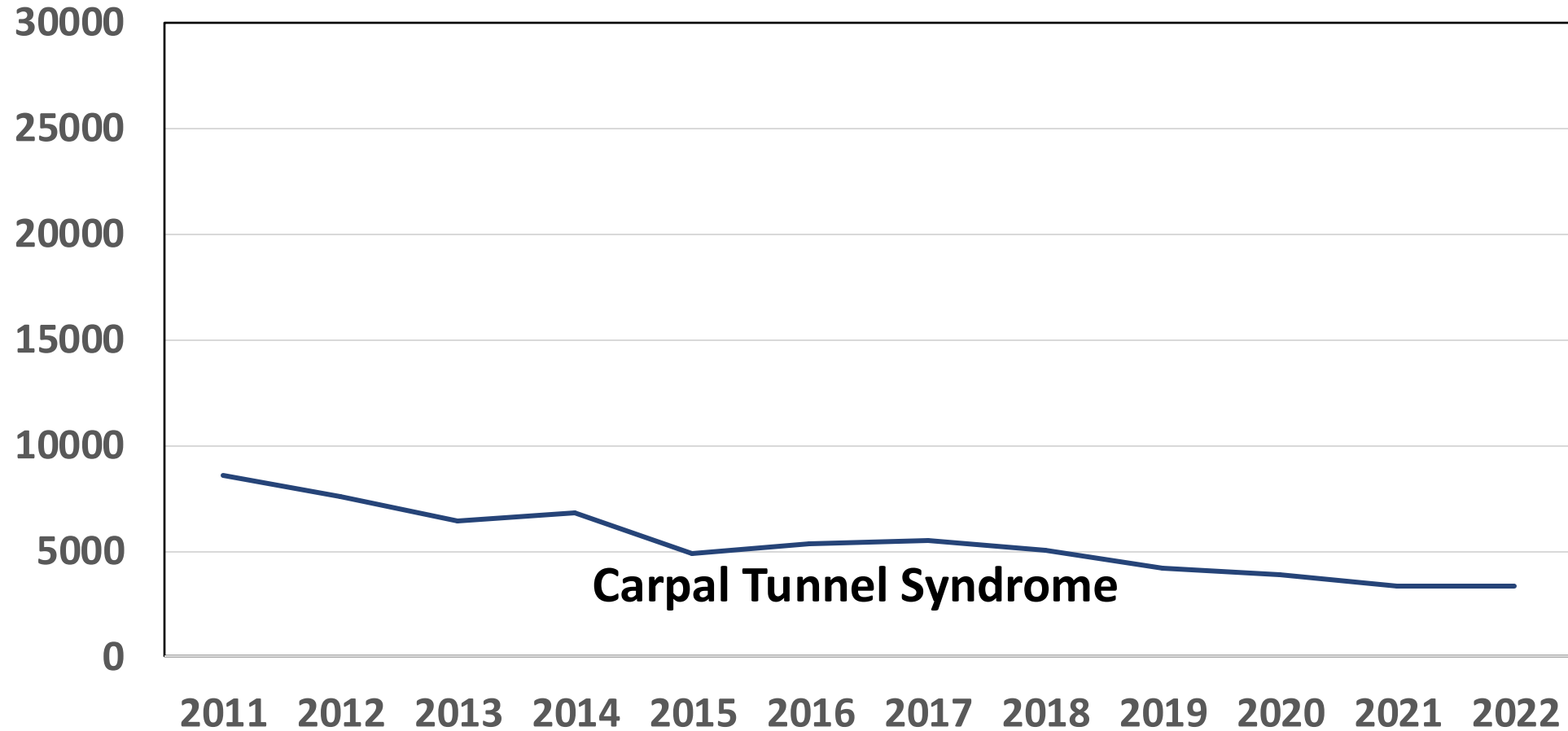


Ontario Work-Related Injury Claims 2012-2023



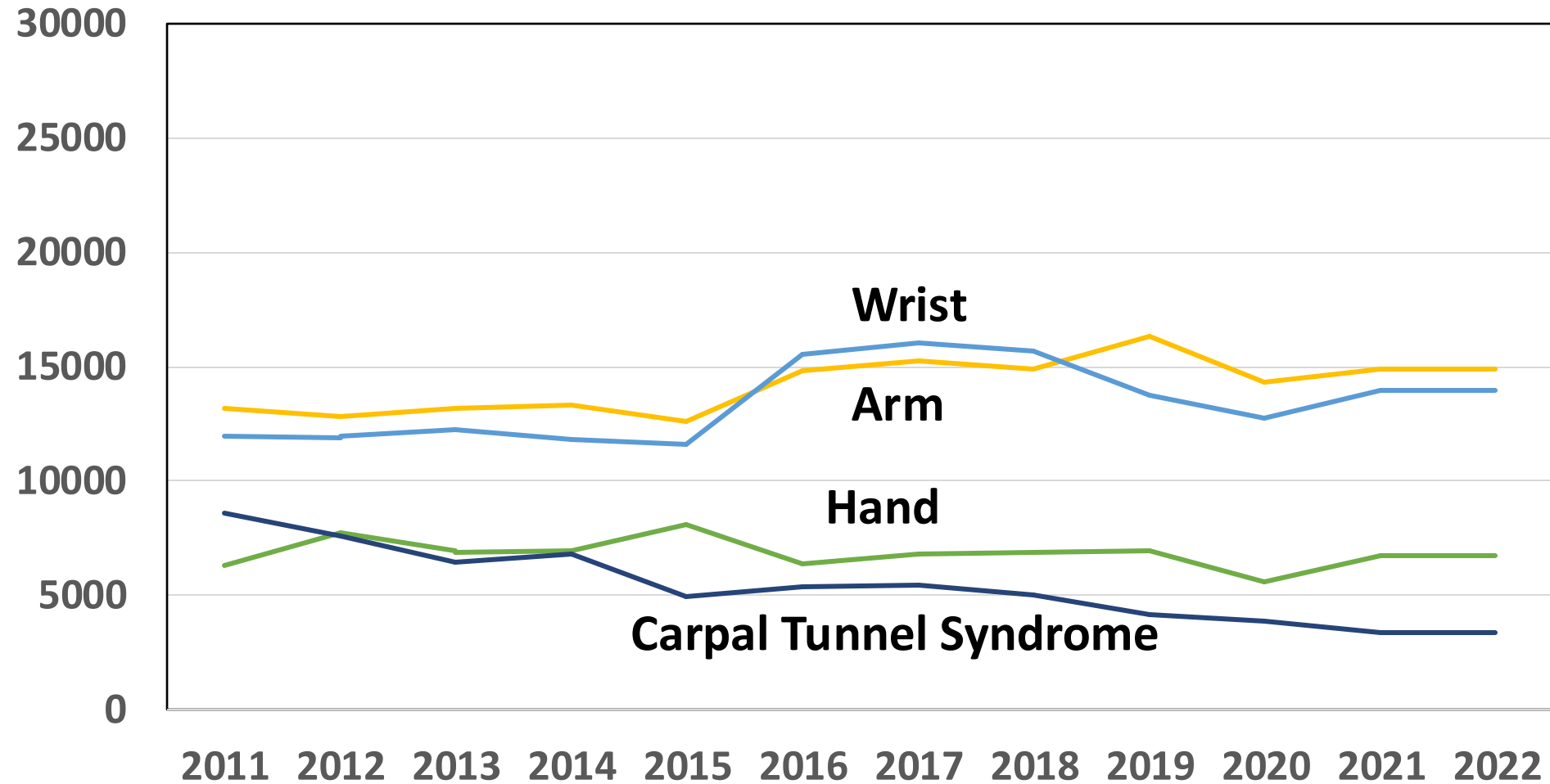
US Work-Related Injury Claims Private 2011-2022

(BLS)



US Work-Related Injury Claims Private 2011-2022

(BLS)



Ontario Carpal Tunnel Surgical Rates 1993-2009

(Fnais et al., PLOS 2014)

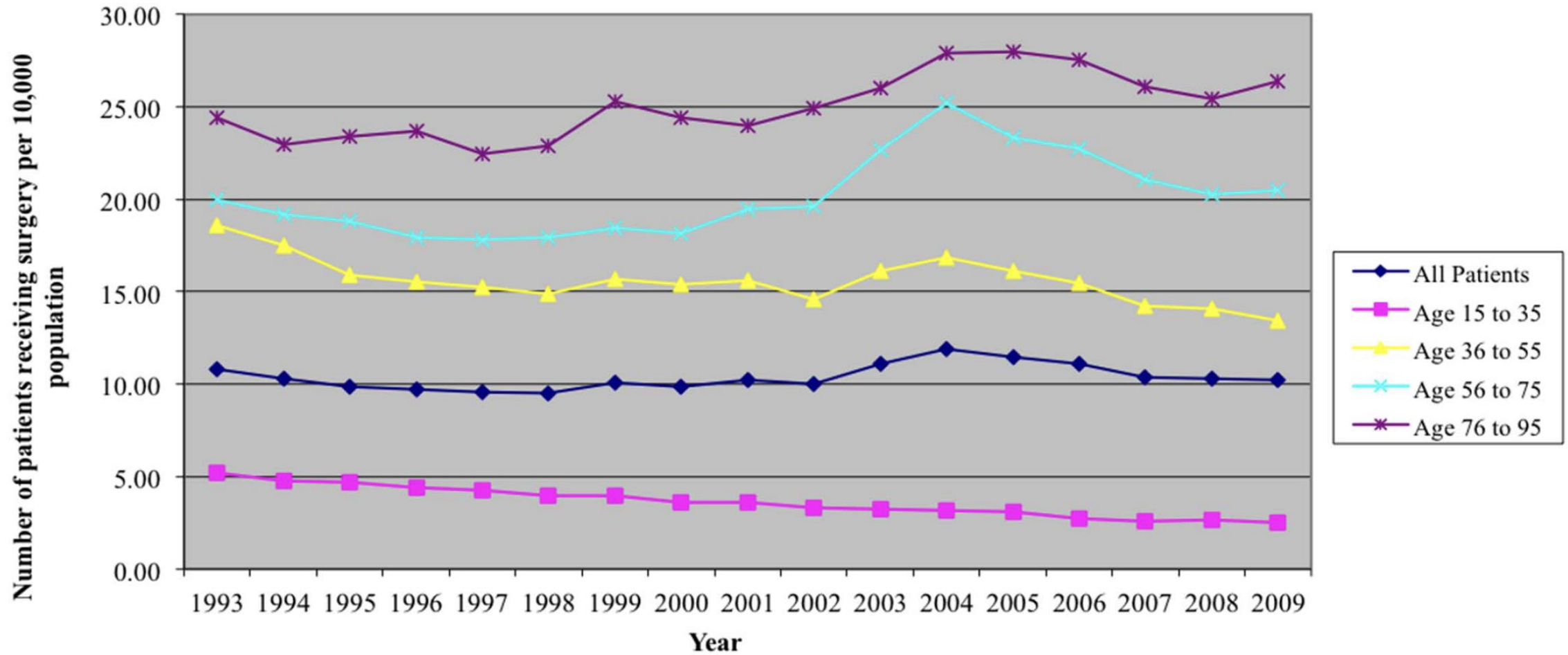
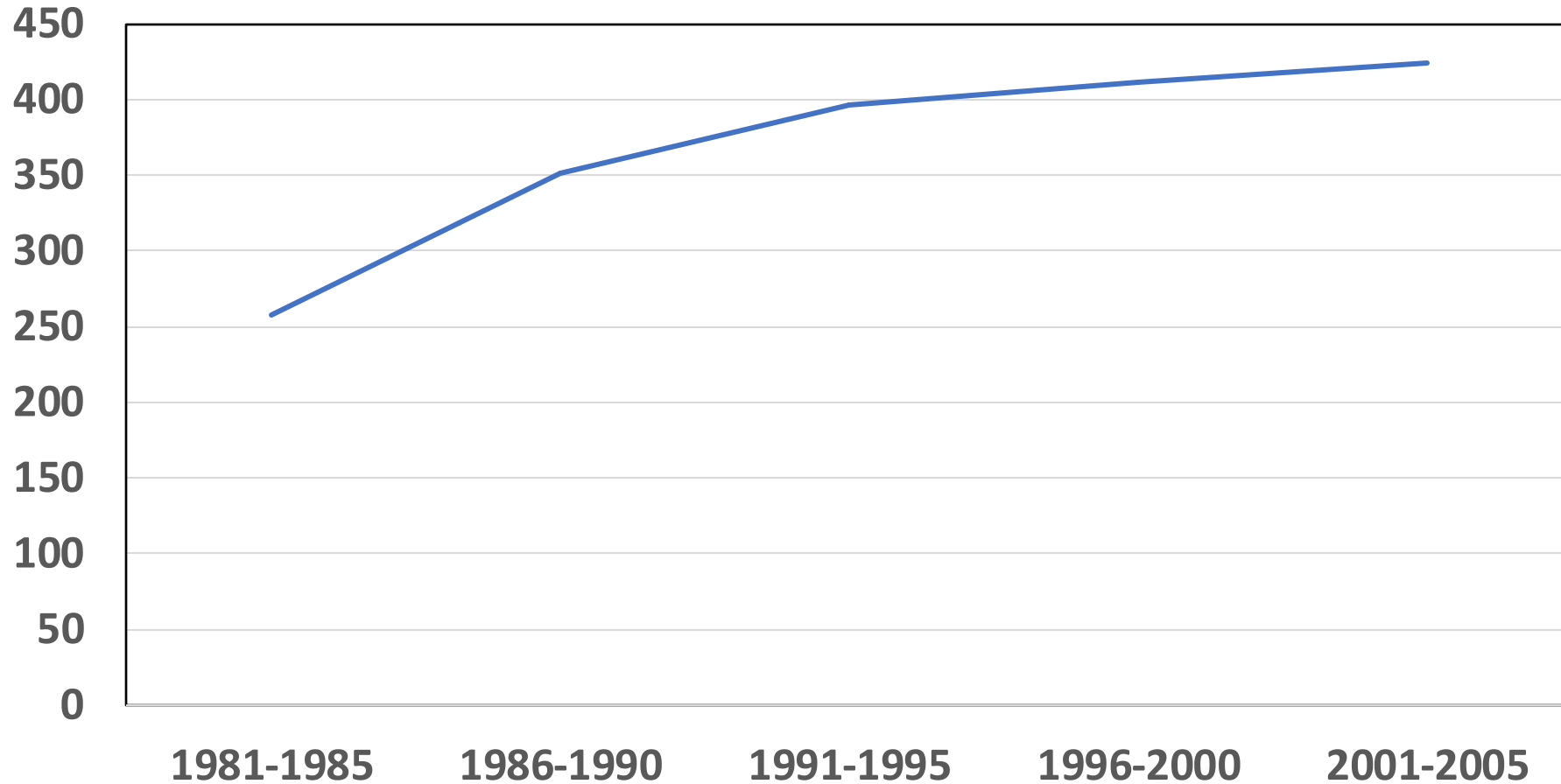


Figure 1. Patient Surgery Rates, stratified by age (per 10,000 population).

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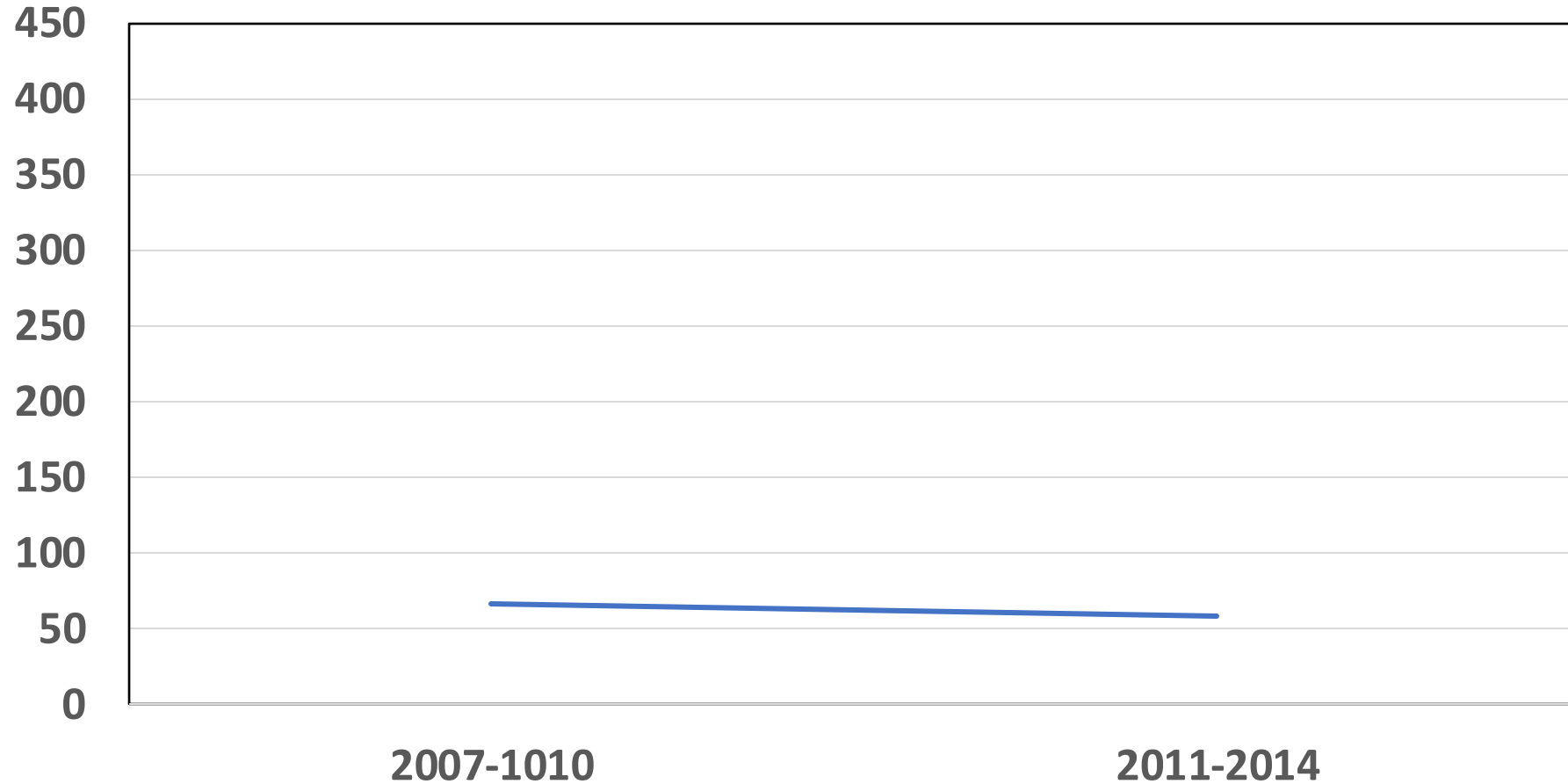
Olmsted County Minnesota All CTS Rate 1981-2005

Annual Incidence per 100,000 (Gelfman et al. 2009)



California Work Related CTS Rate 1981-2005

Annual Incidence per 100,000 (Jackson et al. MMWR, 2018)



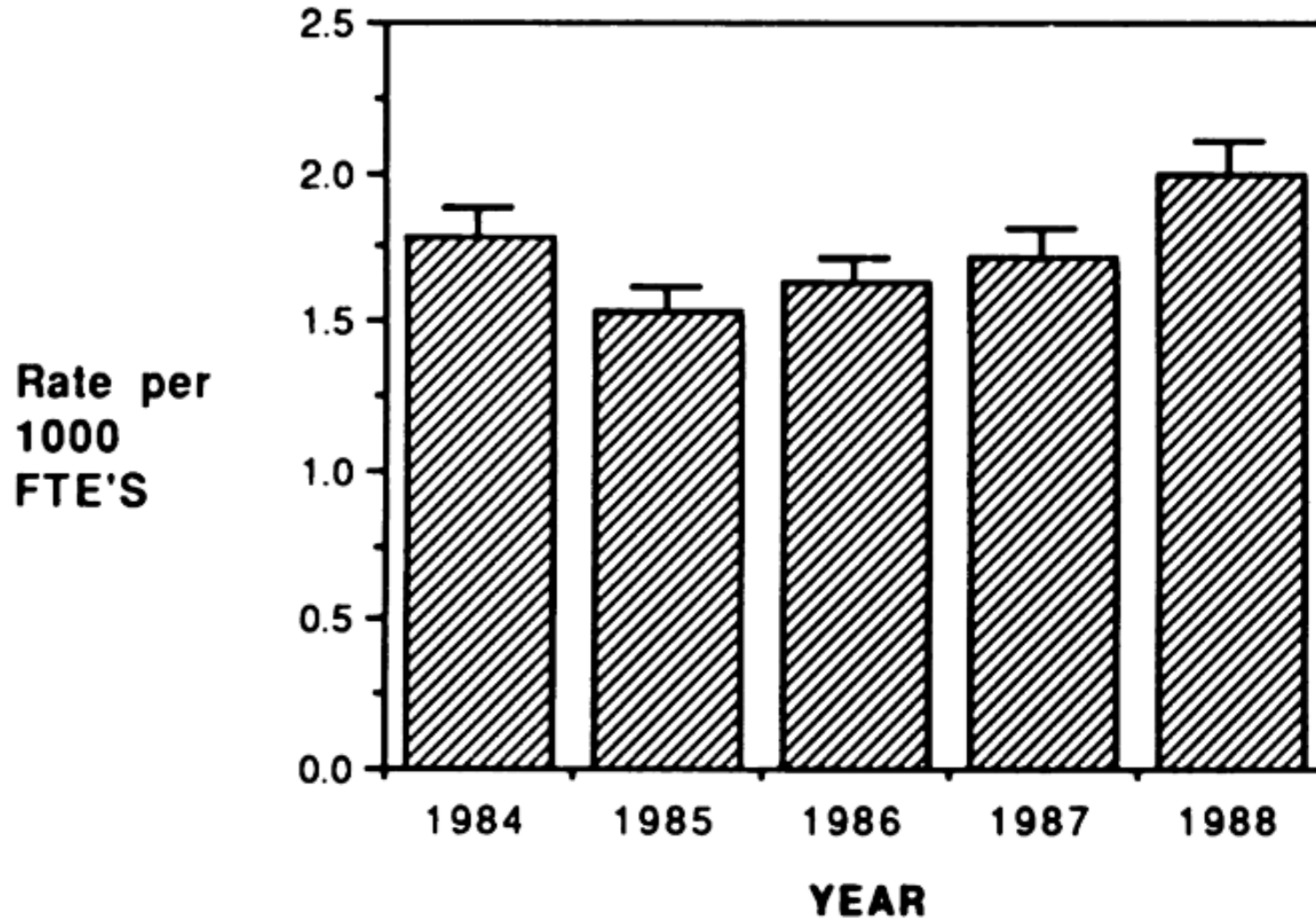
California Work-Related CTS Industry Relative Risk

(Jackson et al. MMWR, 2018)

<u>INDUSTRY</u>	<u>RR</u>	<u>Number</u>
• Machinery Manufacturing	3.6	155
• Knitting Fabric Mills	2.4	32
• Dry Cleaning & Laundry	1.4	572
• Textile fabric finishing	1.3	66
• Apparel manufacturing	1.2	37
• Public Administration	0.9	8713
• Insurance Carriers	0.8	4836

Washington State WC CTS Cases 1984-1988

(Franklin et al. AJP 1991)



Washington State WC CTS Rate Ratio 1984-1988

(Franklin et al. AJP 1991)

<u>INDUSTRY</u>	<u>RR</u>	<u>Number</u>
• Meat poultry	13.8	132
• Fish canneries	10.5	124
• Carpentry	6.5	37
• Sawmills	5.3	139
• Logging	5.1	143
• Clerical	0.1	92
• State employees	1.0	71

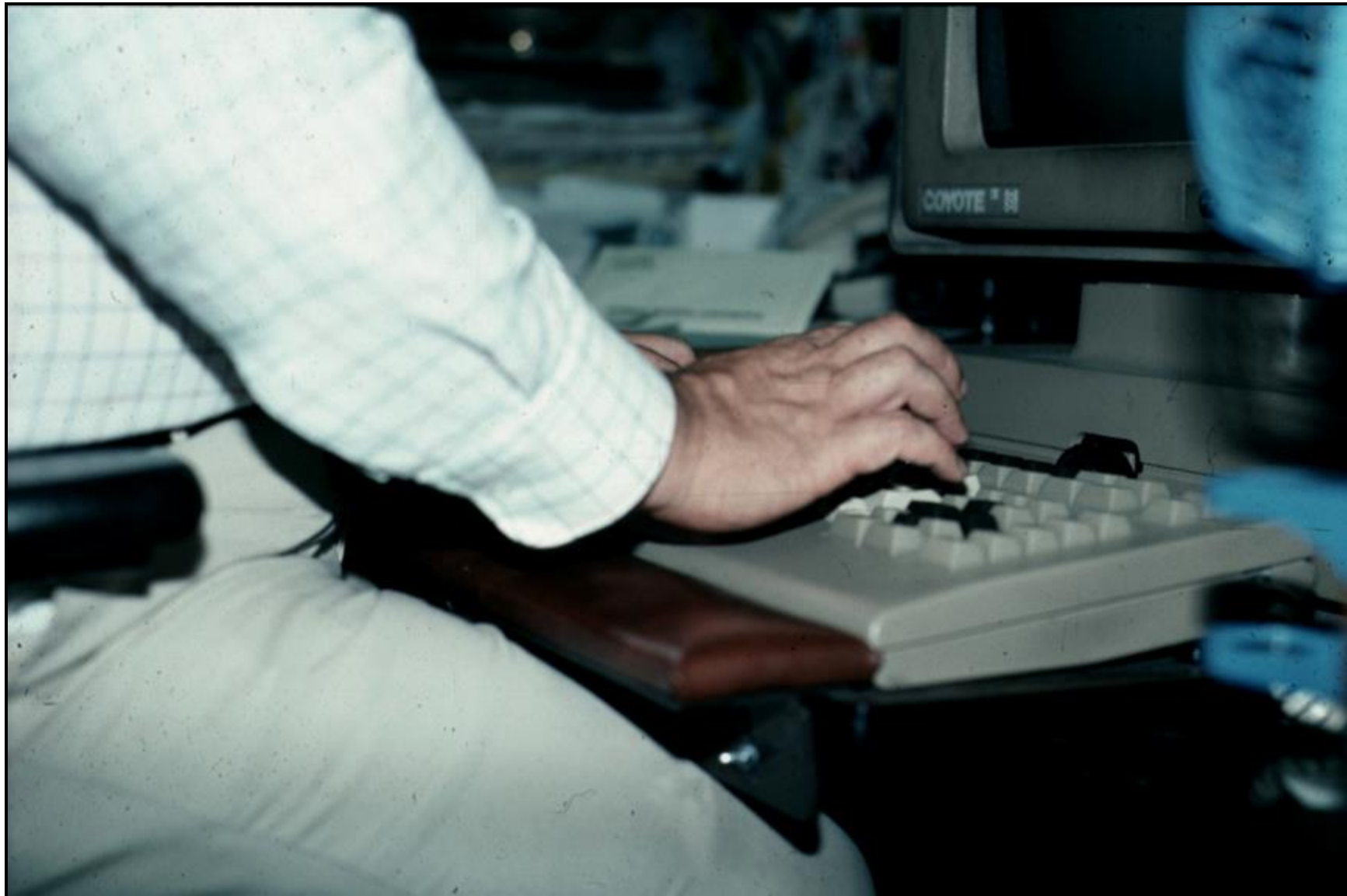
Musculoskeletal Disorders and Computer Use

[Gerr et al. Am J Ind Med 2002, 41:221]

- 632 computer users followed for 3 years
- Daily diaries and triggered physical examinations
- Annual Incidence:

33%	Trapezius muscle strain
16%	Wrist tendonitis
15%	DeQuervain's disease
5%	Epicondylitis
2%	Radicular pain
1%	Carpal tunnel syndrome

Reporter 1989



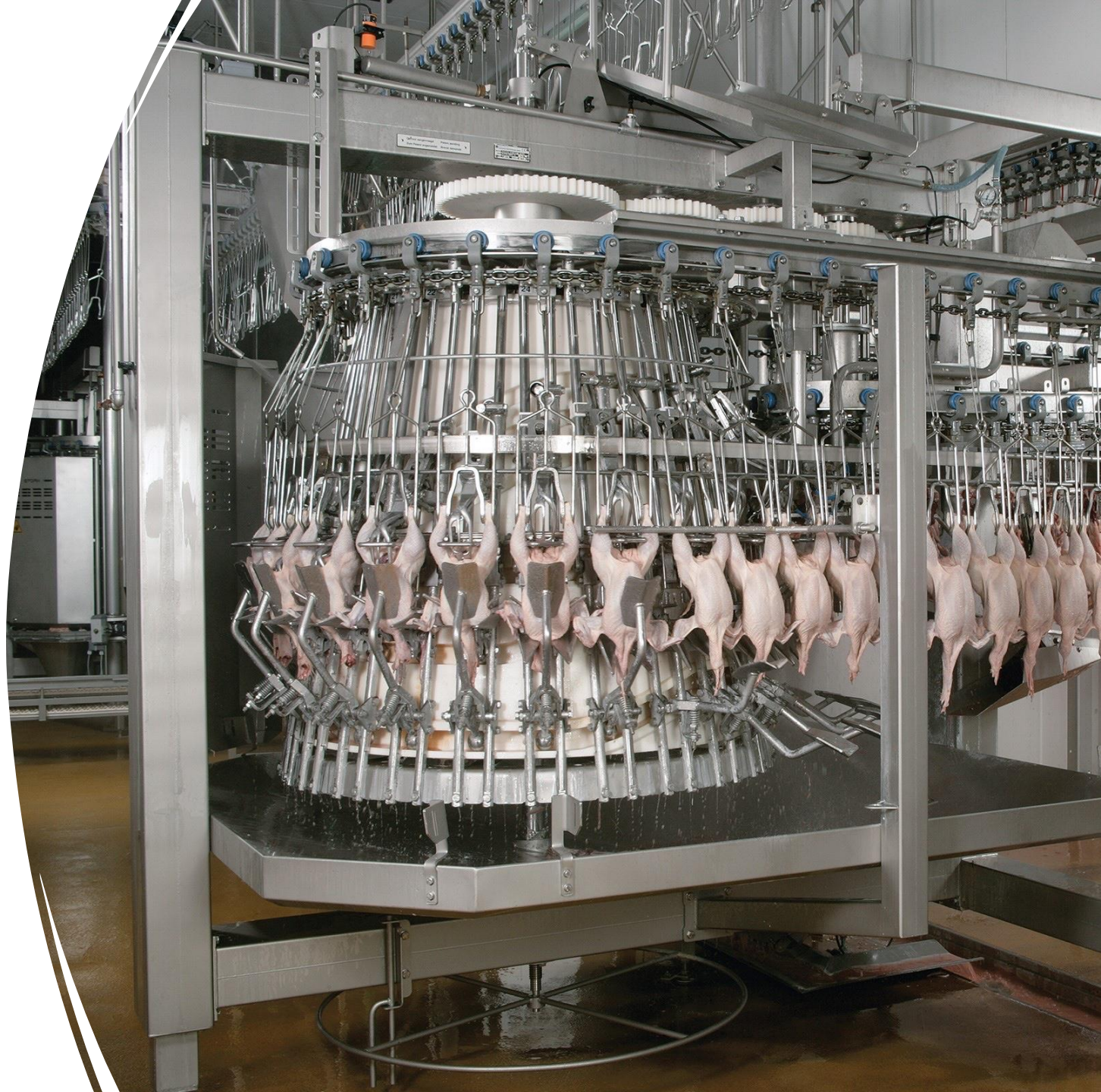
Ergonomic Interventions: Office Work

- Keyboard force, thickness, angle
- Monitor positioning
- Mouse: button force & dragging
- Chair and desk adjustments
- Phone headsets
- Voice recognition
- Work-break pattern

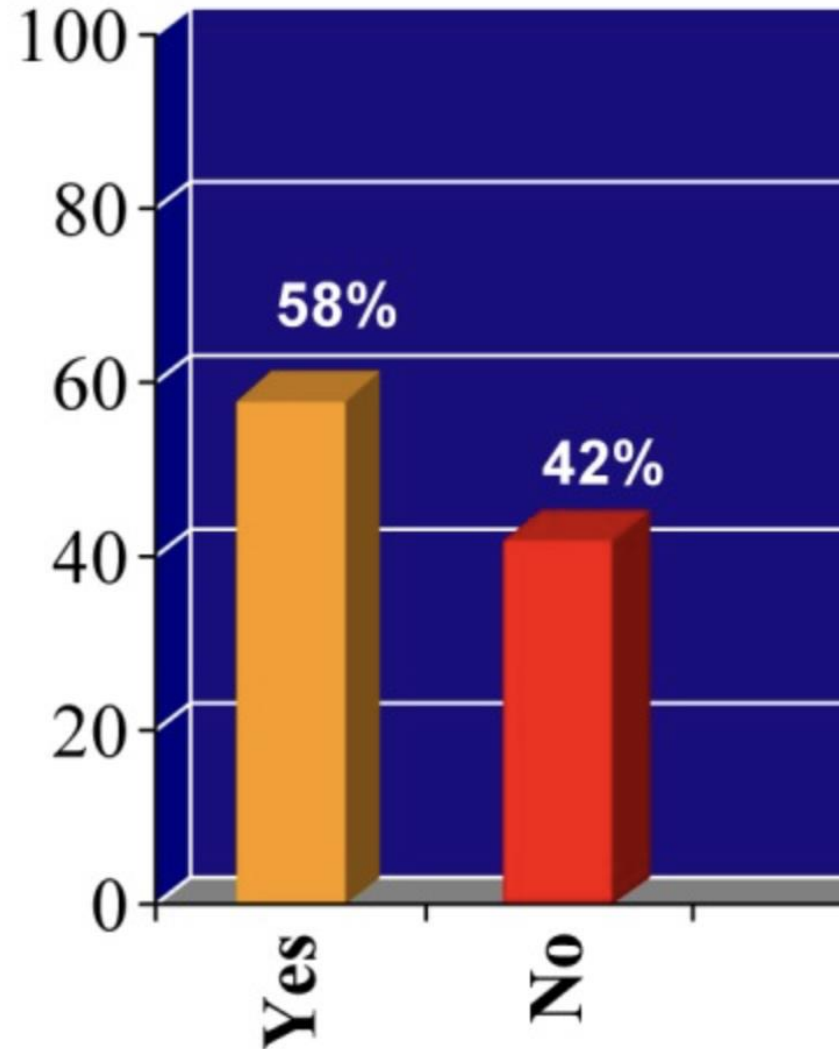


Ergonomic Interventions in Industry

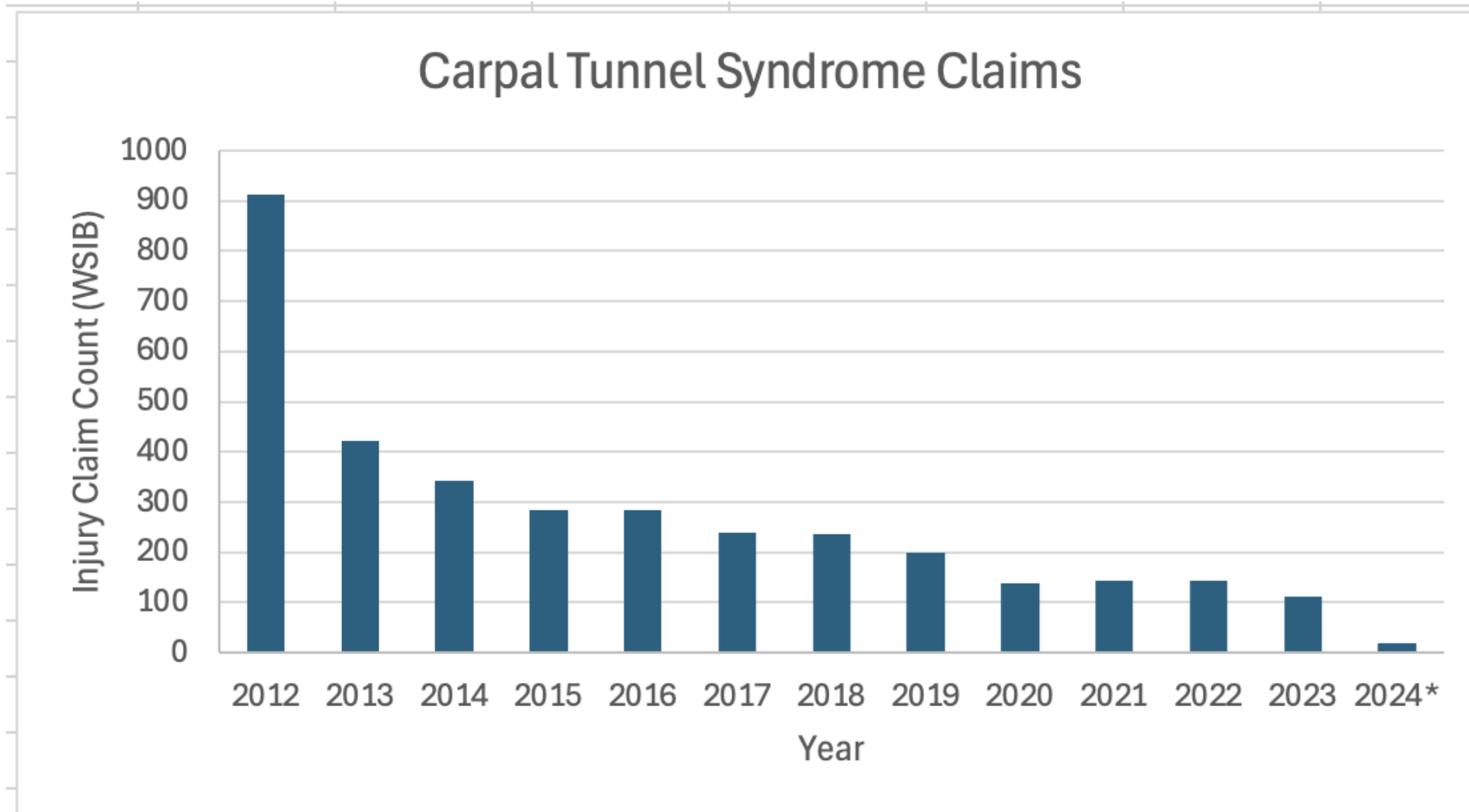
- Automation in poultry and pork
- Auto manufacturing: ACGIH Hand Activity TLV
- Grocery checking: customer unload
- Construction: powered tools
- Warehouse: workstation design



67 Canadian Plastic Surgeons Survey: Support a WC Claim for CTS? (Watts et al. 2003)



Ontario CTS Work-Related Injury Claims



Conclusions

- Carpal Tunnel Syndrome has not gone away
- Computer users were misdiagnosed with CTS; actually tendonitis, etc.
- Musculoskeletal Disorders (& CTS) have declined among all industries
 - Increased knowledge of ergonomic factors
 - Improved equipment design
- Administrative changes impact WC claims for CTS
 - Company, insurance carrier, and physician policy changes
 - Denial of CTS claims of computer users
- Journalists like to write about their issues

Preventing Carpal Tunnel Syndrome



References

AIHA Ergonomics Assessment Tool Kit... <https://aiha-assets.sfo2.digitaloceanspaces.com/AIHA/resources/ErgonomicAssessmentToolkit.pdf>

ACGIH® TLV® for Hand Activity Level.....	14
ACGIH® TLV® for Hand-Arm Vibration.....	16
ACGIH® TLV® for Lifting.....	18
ACGIH® TLV® for Upper Limb Localized Fatigue	20
BWC/OSU Push/Pull Guidelines.....	26
Distal Upper Extremity Tool (DUET).....	28
Liberty Mutual Manual Material Handling (LM-MMH) Equations	30
Lifting Fatigue Failure Tool (LiFFT).....	33
Revised NIOSH Lifting Equation (1991) (RNLE)	35
OSHA Computer Workstation Checklist	42
Rodgers Muscle Fatigue Assessment	54
Revised Strain Index.....	56
Washington State (WISHA) Caution Zone	62
Washington State (WISHA) Hazard Zone	64
Washington State (WISHA) Lifting Calculator.....	66

.....and more.....

Questions and Comments

