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Insurance Brokers & Consultants

Realities of the Aging Workforce

October 3, 2023

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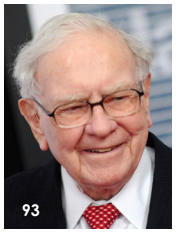
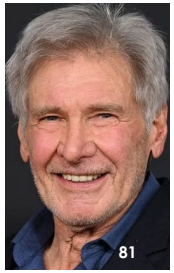
Who Are "Older" Workers?

It depends….

- There is **no exact distinction** between an older worker and a younger worker.
- Scientists: **>50-55**.
- Older workers and chronic illnesses described in age groups **55-64** and **65+**
- Age Discrimination in Employment Act (ADEA): Any worker over age **40**
- American Association of Retired Persons (AARP) **50+** to join
- Aging in the spine starts in your **20's**
- IHOP – Senior menu – **55+**





Jayne Burns, Fabric Cutter, 100

Gerard Mourou, Nobel Prize Physics, 2018, 92

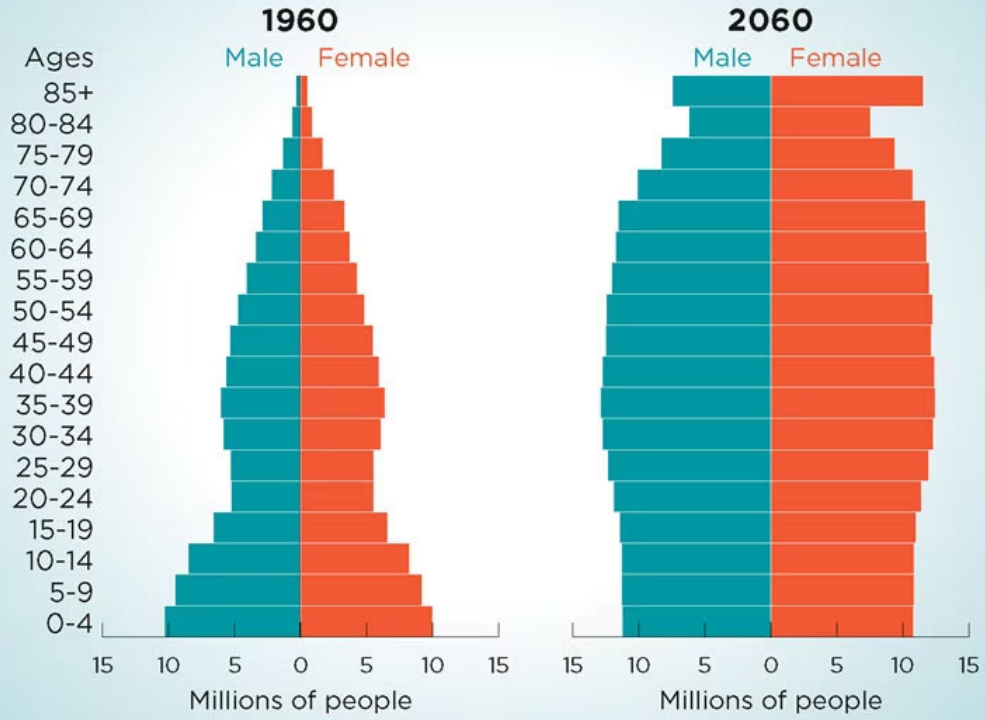
"Why focus on workers 65 & over?"

- The oldest workers (65 and over), on average, are the most-likely to have age-related **declines in (maximum) physical capabilities**.
- The oldest workers can be expected to be impacted most by **comorbidities**.
- If the workforce is aging, what WAS considered old is **even older** now.
- Because of **longer lifespans** and **compression of morbidity**, chronological age may not be the best measure of aging, and that someone age 65 today is much younger biologically than someone 65 in 1950.

Let's look at how our US population HAS changed and is EXPECTED to change.

From Pyramid to Pillar: A Century of Change

Population of the United States



United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

Source: National Population Projections, 2017
www.census.gov/programs-surveys/popproj.html

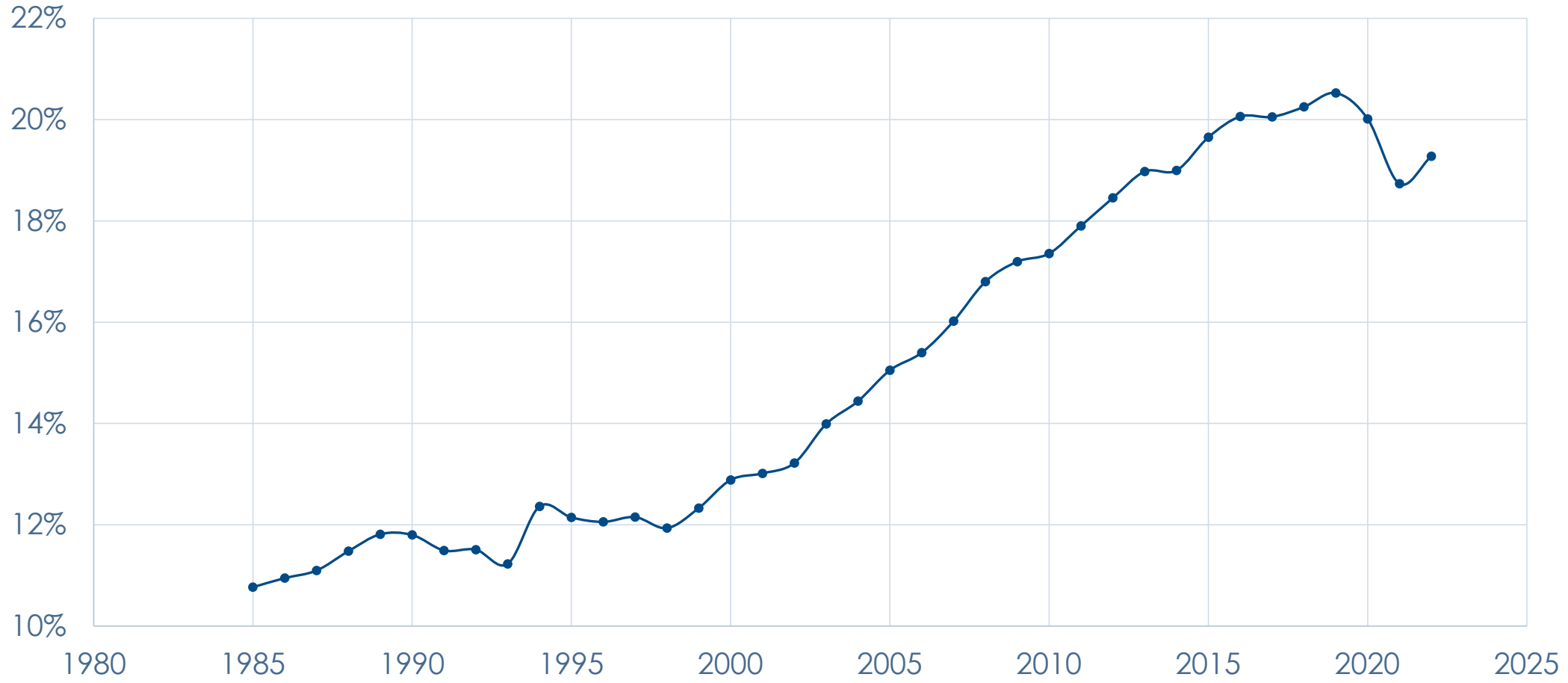
Important Conclusion #1:
Without question – the US *population* is aging.

But we need to be VERY careful about differentiating between the aging *population* and the aging *workforce*.

Not everyone in the *population* is part of the *labor force* (working or looking for work).

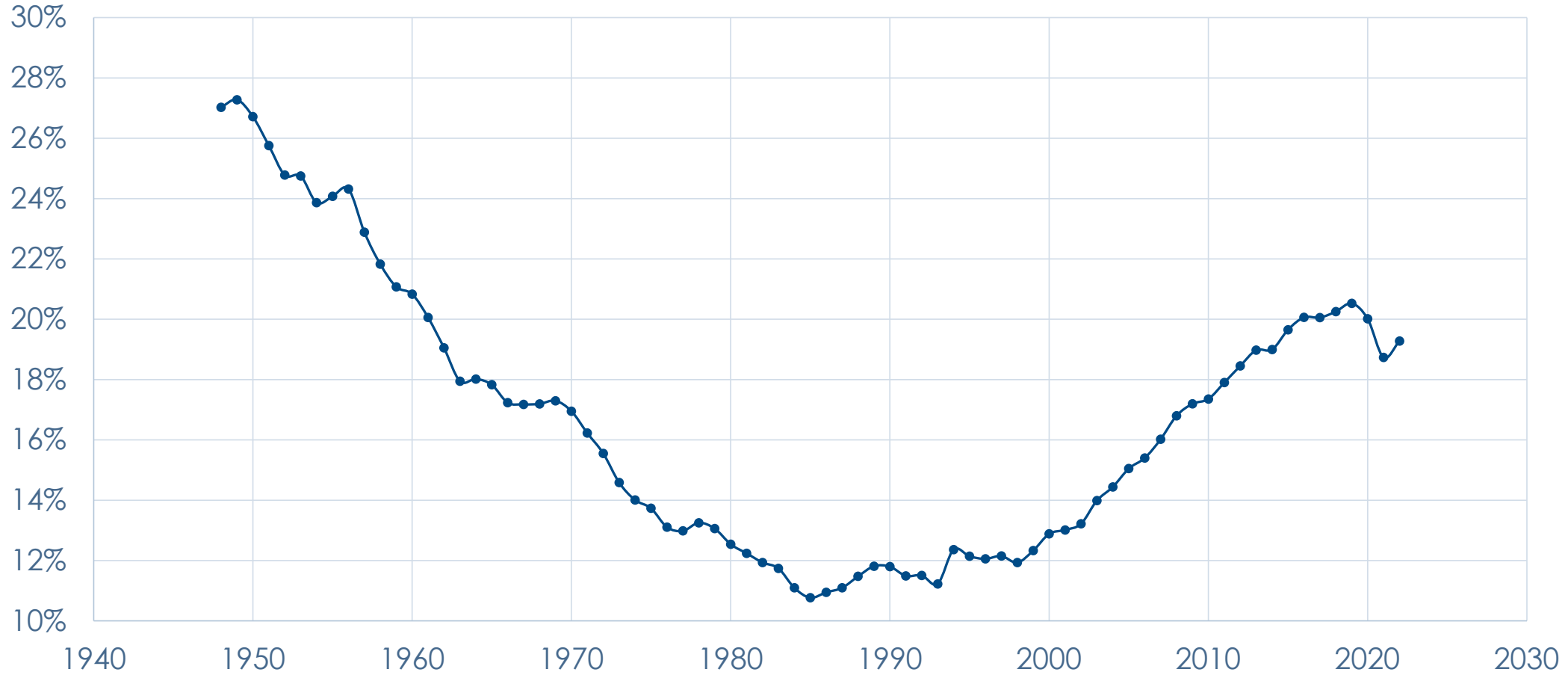
Let's break it down a bit more.

Percent of Civilian Noninstitutionalized Population Age 65+ Participating in Labor Force



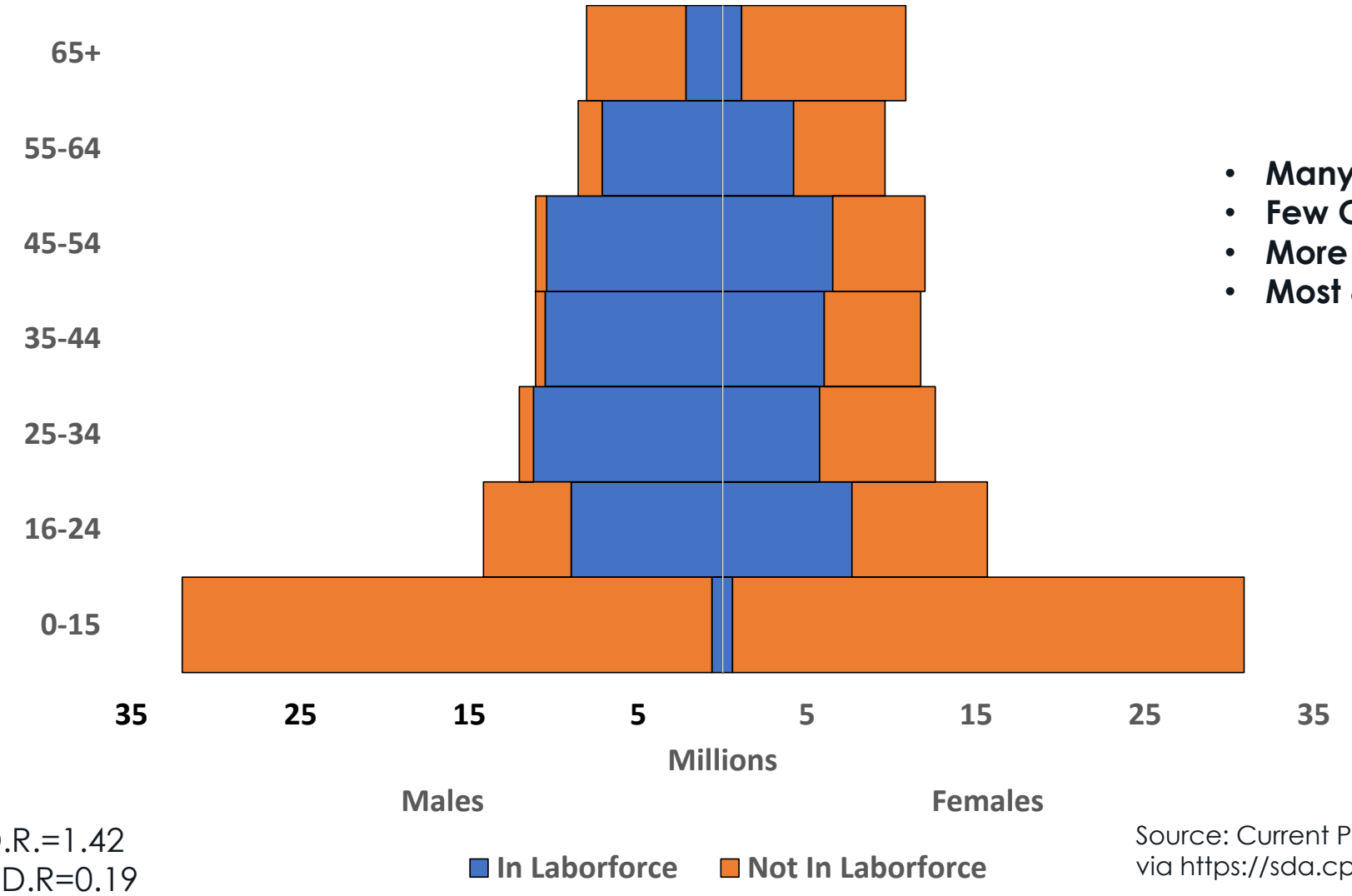
Source: Current Population Survey via https://www.census.gov/topics/population/age-and-sex/data

Percent of Civilian Noninstitutionalized Population Age 65+ Participating in Labor Force



Source: Current Population Survey via https://www.census.gov/topics/population/age-and-sex/data

1970 Distribution by Age Range and Labor Force Status

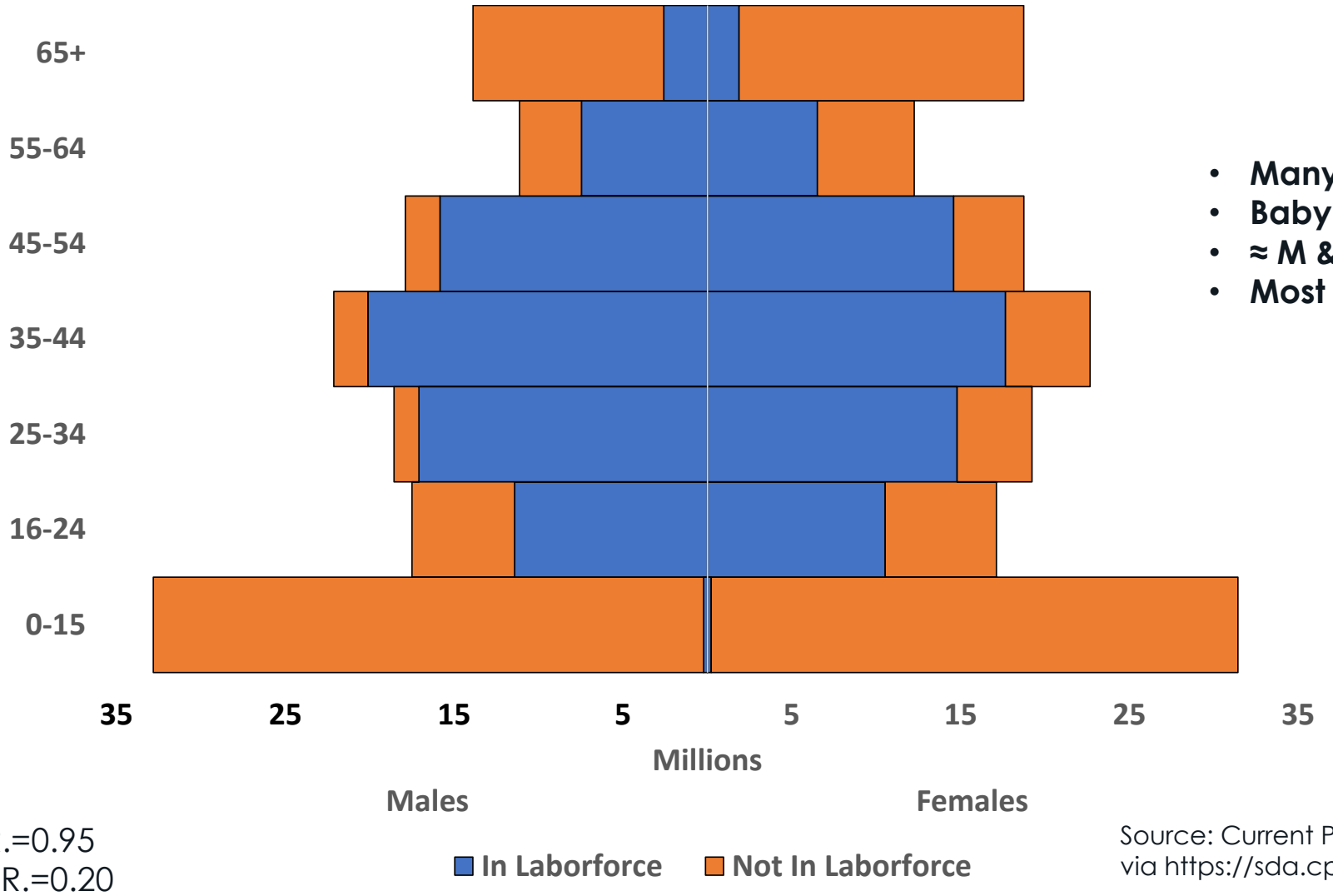


- Many 0-15 (NLF)
- Few Older (55+)
- More Men in LF
- Most 65+ NLF

D.R.=1.42
O.D.R=0.19

Source: Current Population Survey
via https://sda.cps.ipums.org

2000 Distribution by Age Range and Labor Force Status

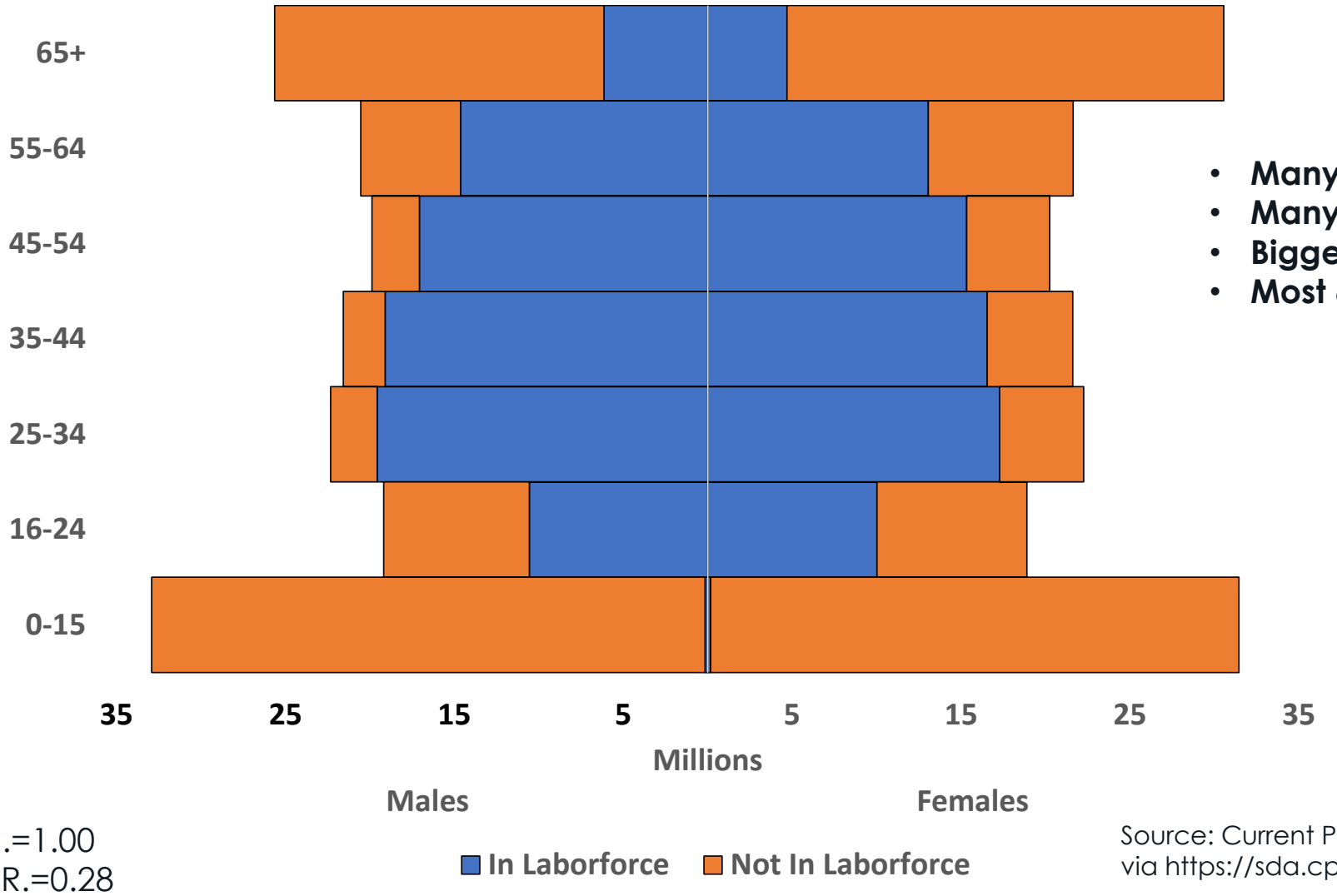


- Many 0-15 (NLF)
- Baby Boom 36-54
- ≈ M & F in LF
- Most 65+ NLF

D.R.=0.95
O.D.R.=0.20

Source: Current Population Survey
via https://sda.cps.ipums.org

2022 Distribution by Age Range and Labor Force Status

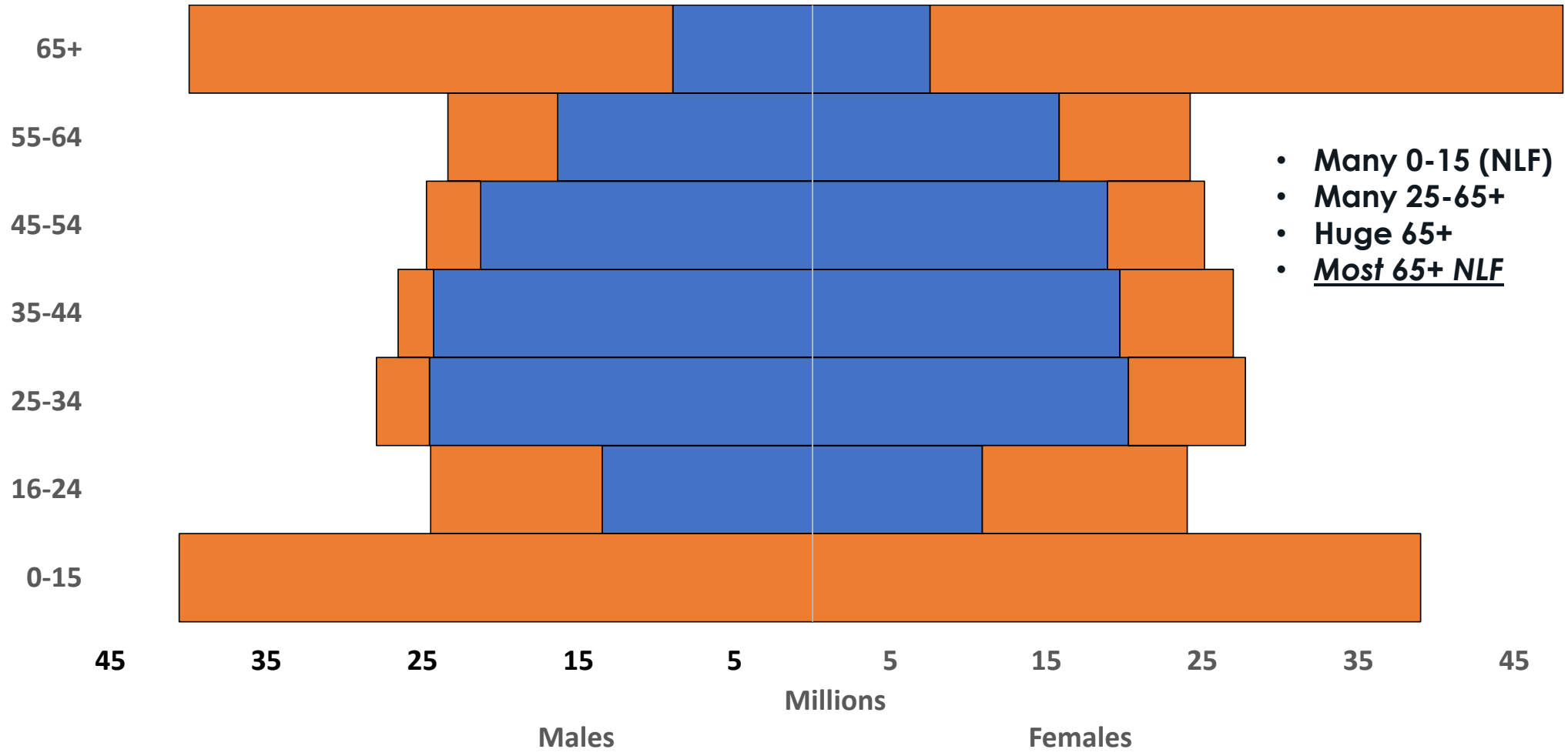


- Many 0-15 (NLF)
- Many 25-65+
- Biggest 65+
- Most 65+ NLF

D.R.=1.00
O.D.R.=0.28

Source: Current Population Survey
via https://sda.cps.ipums.org

2060 Projected Distribution by Age Range and Labor Force Status



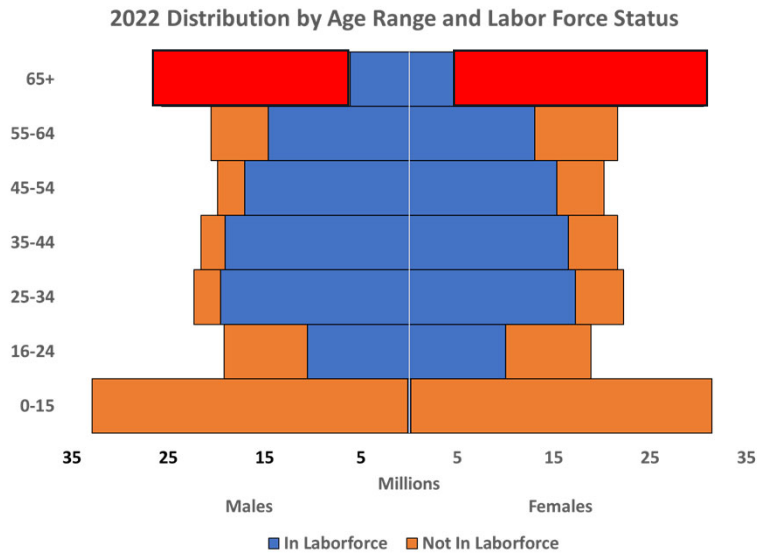
- Many 0-15 (NLF)
- Many 25-65+
- Huge 65+
- ***Most 65+ NLF***

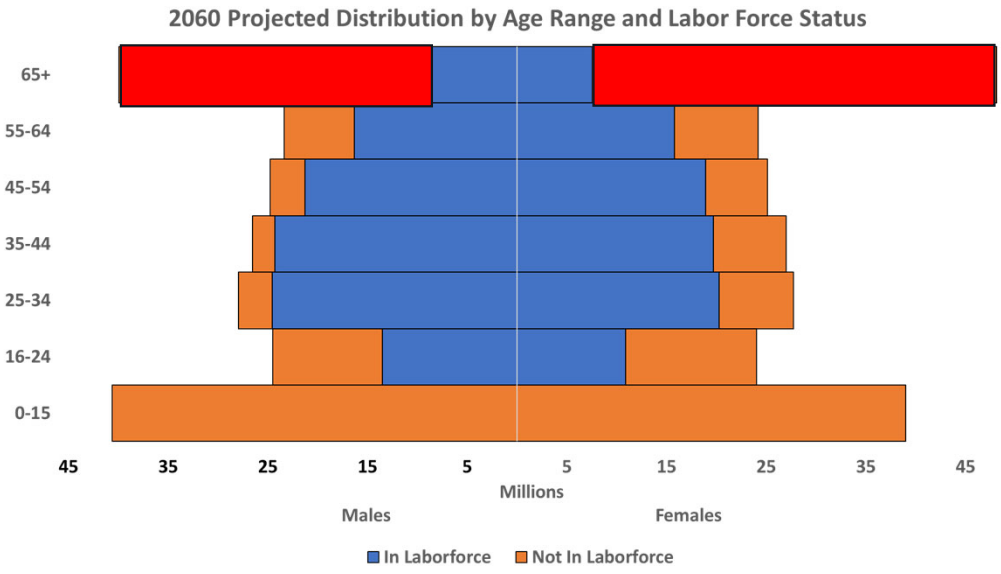
D.R.=1.09
O.D.R.=0.35

Source: Toossi, M. 2012. Projections of the labor force to 2050: a visual essay.

Key Data Observations

- The oldest age ranges are increasing in ***population***.
- **However, the vast majority of people 65+ will continue to *retire* from the Labor Force.**
- Consequently, the percentage of the oldest people in the Labor Force will always be far **lower** than other working age ranges 20-64.

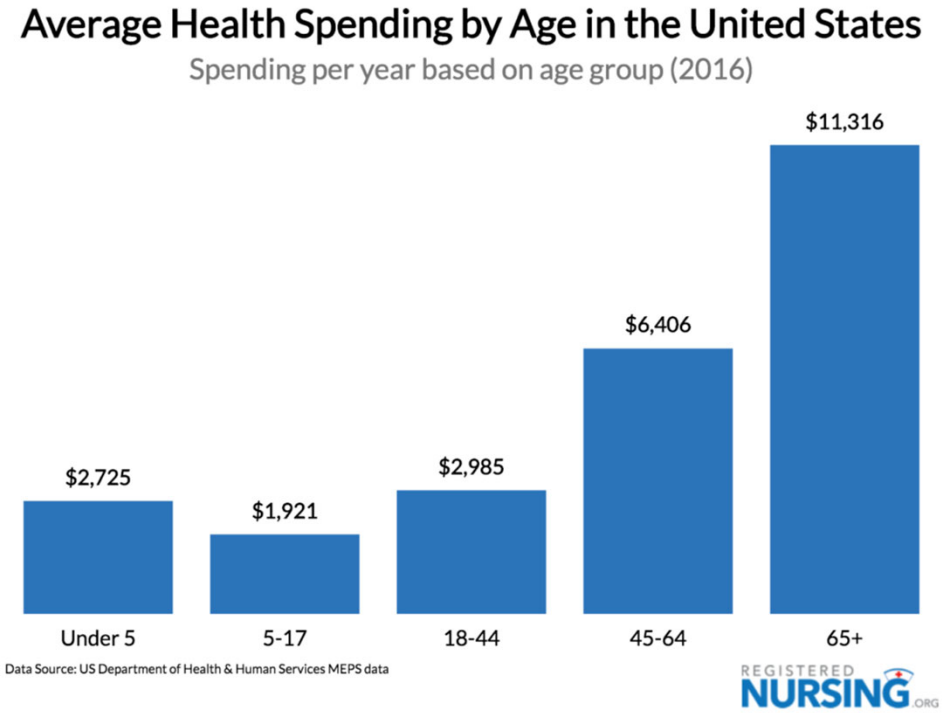




(VERY) Important Conclusion #2:
Despite the *population* aging, most of the oldest people (65+) WON'T be working.

Reasons why this is so important:

1. We are living longer.
2. The older we get, the more chronic medical conditions we have.
3. The older we get, the more we spend on health care (*& health care costs $ keep increasing*).



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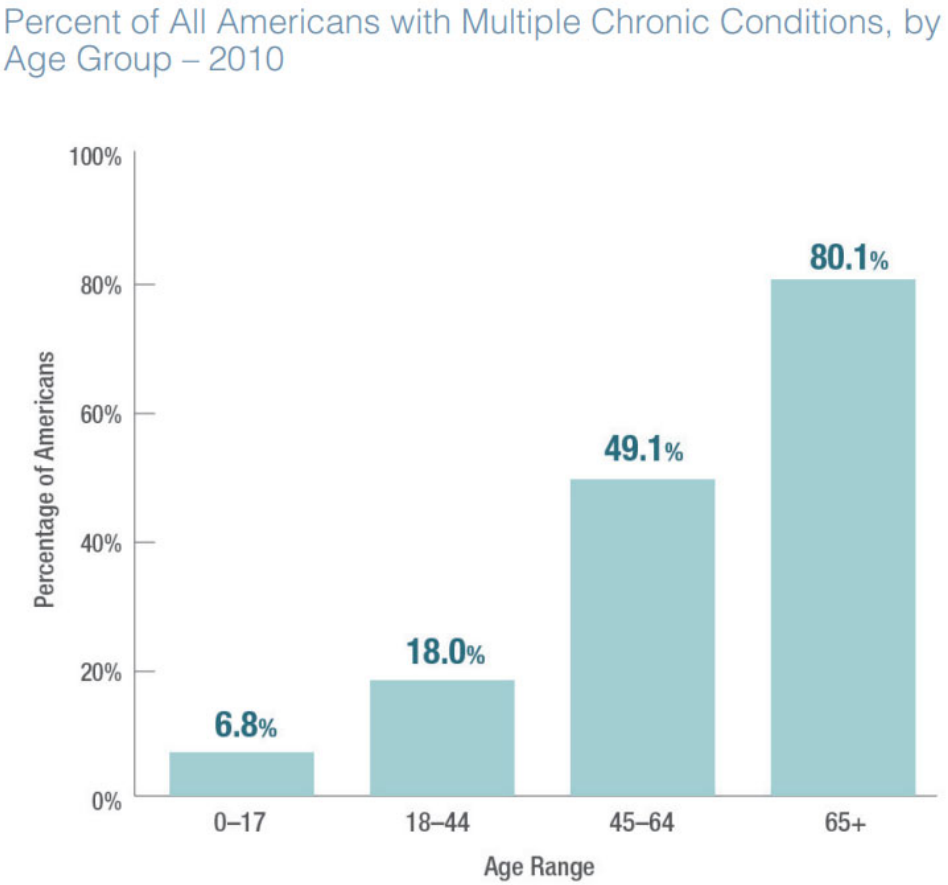

Chronic Condition: "one that lasted or was expected to last twelve or more months and resulted in functional limitations and/or the need for ongoing medical care." Source: Gerteis J, Izrael D, Deitz D, LeRoy L, Ricciardi R, Miller T, Basu J. Multiple Chronic Conditions Chartbook. AHRQ Publications No, Q14-0038. Rockville, MD: Agency for Healthcare Research and Quality. April 2014

Reasons why this is so important:

1. We are living longer.
2. The older we get, the more chronic medical conditions we have.
3. The older we get, the more we spend on health care.
4. **The Dependency Ratio (# People NOT in the Labor Force per # People in the Labor Force)**

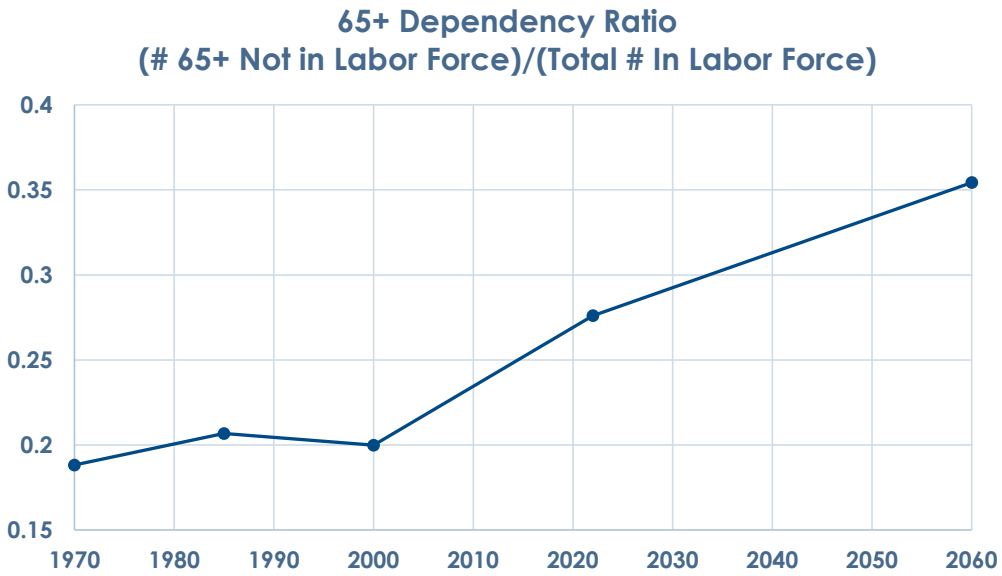

Image From: https://www.datadriveninvestor.com/

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(VERY) Important Implication #1:

The consequences of more older NON-workers may be more impactful than having more older workers:

- Strain on social support systems (e.g., social security)
- Strain on health care
- Strain on health insurance
- Strain on the labor force (taxes/insurance) to pay for it all

ALSO! More liability for falls on premises in public-accessible properties!

The "Bad" News – What you've already heard (a lot)

- Increases in:
  - Chronic Conditions
  - Medications
- Declines in:
  - Strength
  - Balance
  - Reaction Time
  - Max Oxygen uptake
  - Maximum Heart Rate
  - Tolerance to shift work
  - Vision
  - Gait
  - Hearing (try a youtube hearing test)
  - Memory

Declines in:

- Episodic (what did I have for breakfast?)
- Source (where did I learn about that?)
- Flashbulb (where was I on Sept. 11, 2001)

Less Change in:

- Semantic (words, concepts, stories)
- Procedural (riding a bike)
- Implicit (passive/unconscious learning, like singing a song or *making* breakfast)

Source: http://ijmess.org/assets/front_end/uplodes/gallery/eec43027a0cb57c11a5c812f817e5fb01551868459193.pdf
See also: Balota, et al., 2000. Memory changes in healthy young and older adults. The Oxford Handbook of memory.

Are older workers as productive as younger workers?

- **Wisdom, Job Skills, supportive social networks, and accuracy/quality INCREASE with age**.
- Older workers develop **compensating adaptations** for cognitive and/or physical capability declines.
- Oftentimes older workers are **mentoring** younger workers and therefore parlay their own productivity by increasing the productivity of others.
- **Conscientiousness, agreeableness, and emotional stability increase as we age.**
- **Manual material handling capacity** is maintained into the early 60's.
- But if the job is already designed with **excessive physical or cognitive demands**, yes, performance can decrease.

Sources: Roberts, et al., 2006. Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies.
Petery et al., 2023. **Clearing up myths about older workers** while understanding and supporting an aging workforce. https://blogs.cdc.gov/niosh-science-blog/2023/09/25/older-workers/
Mital, et al., 1997. Manual materials handling.
Brogmus, G.E., 1991, September. Effects of age and sex on speed and accuracy of hand movements: And the refinements they suggest for Fitts' Law. In Proceedings of the Human Factors Society Annual Meeting (Vol. 35, No. 3, pp. 208-212). Sage CA: Los Angeles, CA: SAGE Publications.

Some important stuff to keep in mind:

Individual Variability	• Variation in capabilities WITHIN an age range often much greater than BETWEEN age ranges
Misleading Data	• Not occupational criteria • Older *people*, not *workers*
Design-driven	• As long as tasks don't exceed guidelines for ALL workers, age is rarely a factor • E.g., MMH risk criteria INCLUDE older worker capabilities.
Disuse = Declines, not necessarily chronological age	• 60-70 year olds can improve performance and balance through practice exercise • Even at age 90 exercise can increase strength!

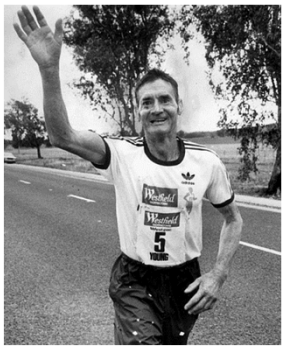
Burt Munro, 68

1967 Bonneville Salt Flats

- World Record 183.59mph
- World's Fastest Indian (movie)

Dr. Otto Thaning, 73

2014 Oldest person to swim the English Channel (about 30 miles)



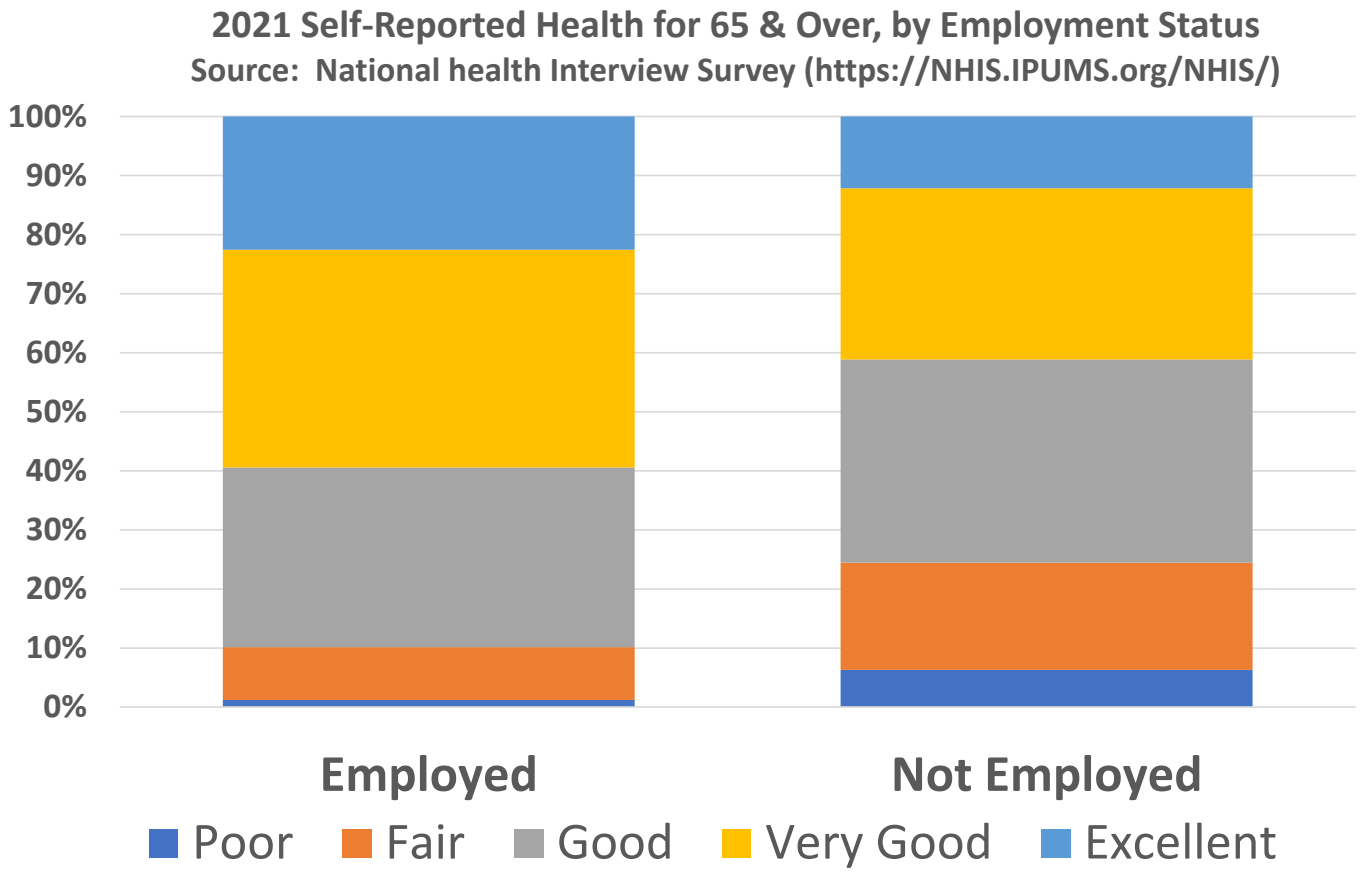
Cliff Young, 61

1983 Sydney to Melbourne (>500 miles)

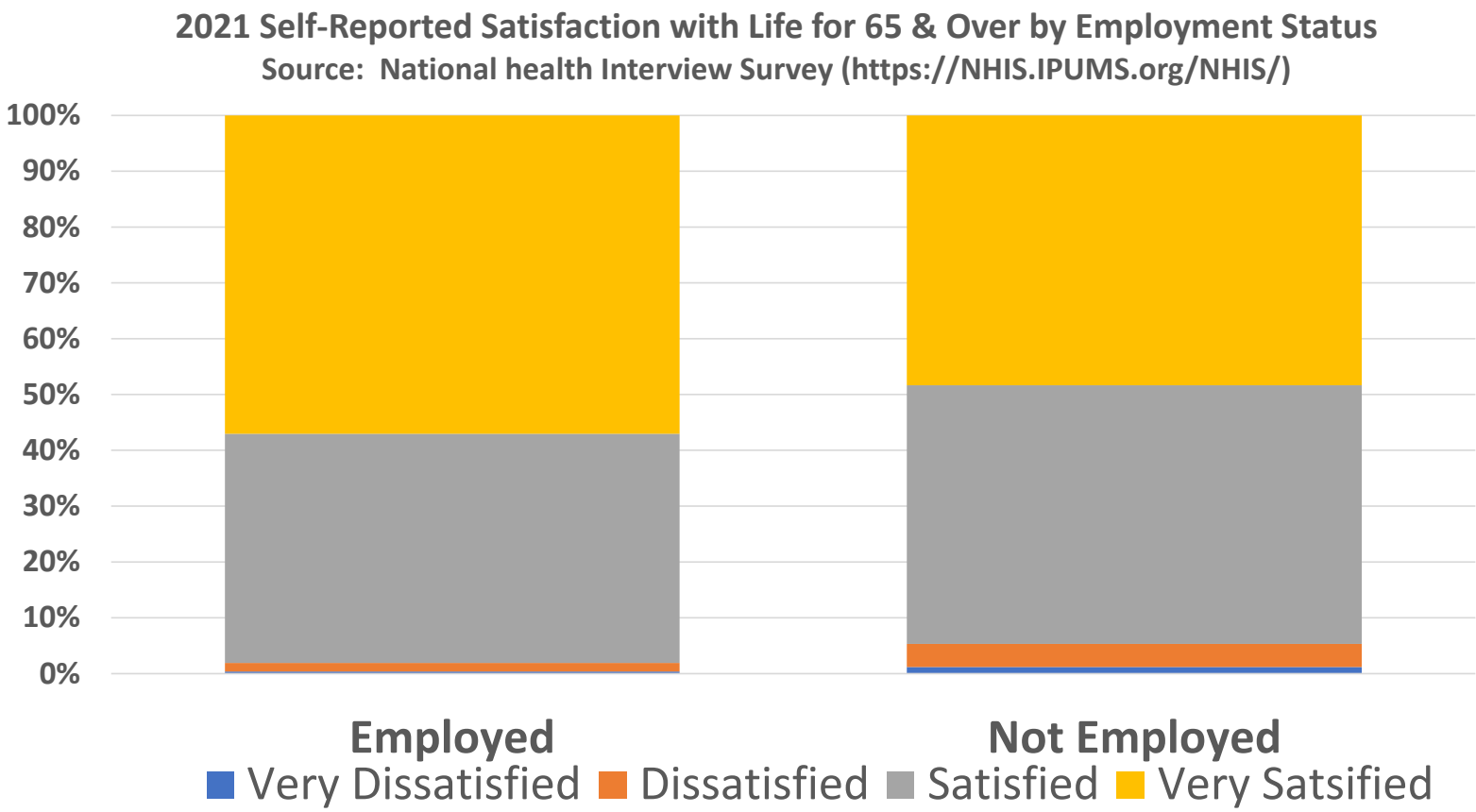
- Laughs; end of pack; beat previous record…by TWO DAYS!

Again – remember that older PEOPLE are not necessarily older WORKERS; Older WORKERS are healthier

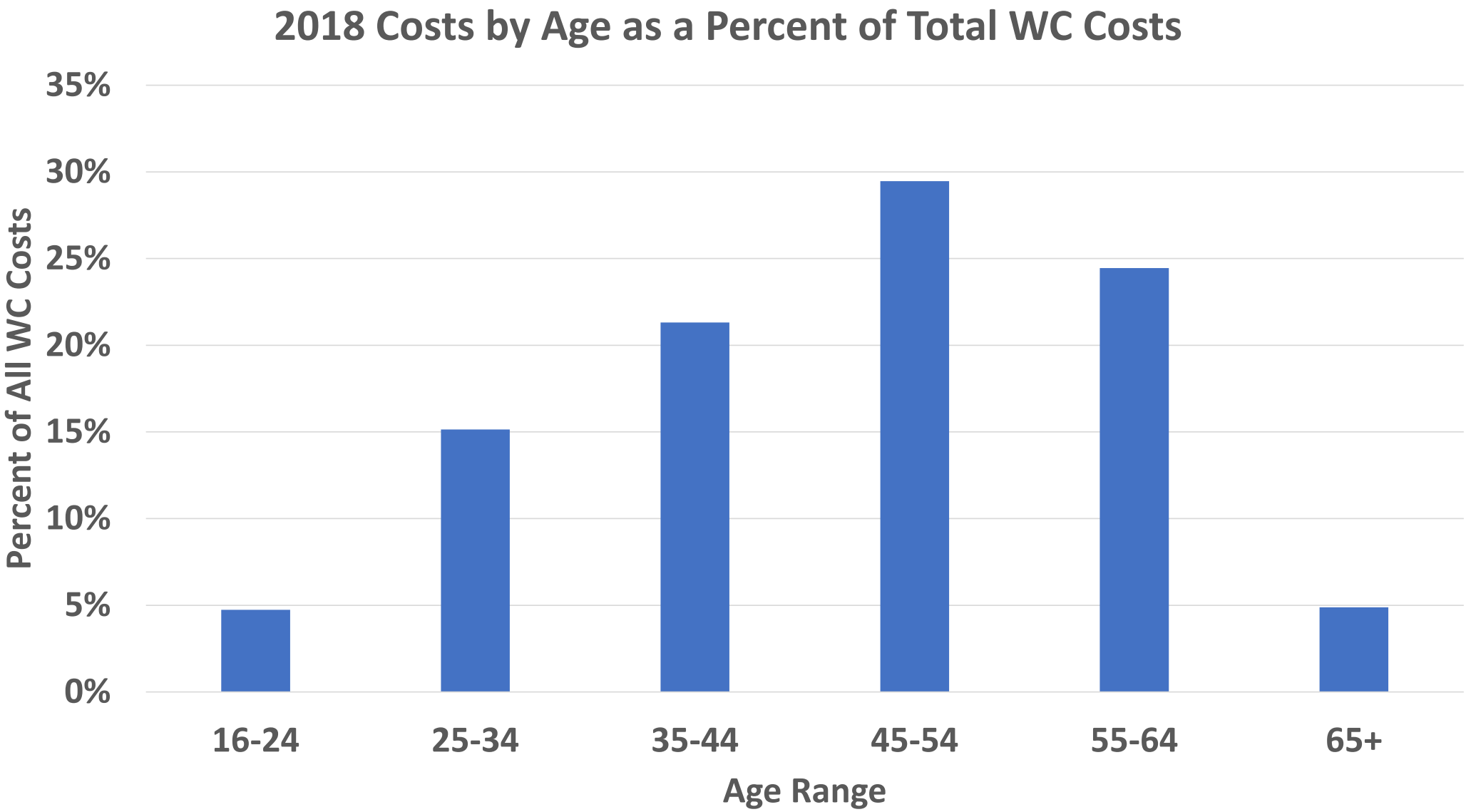
- 90% of Employed 65 & Over report Good or better health (compared to 76% of Not Employed)
- Nearly TWICE as many employed report Excellent health compared to Not Employed



Older WORKERS are More Satisfied with their Lives

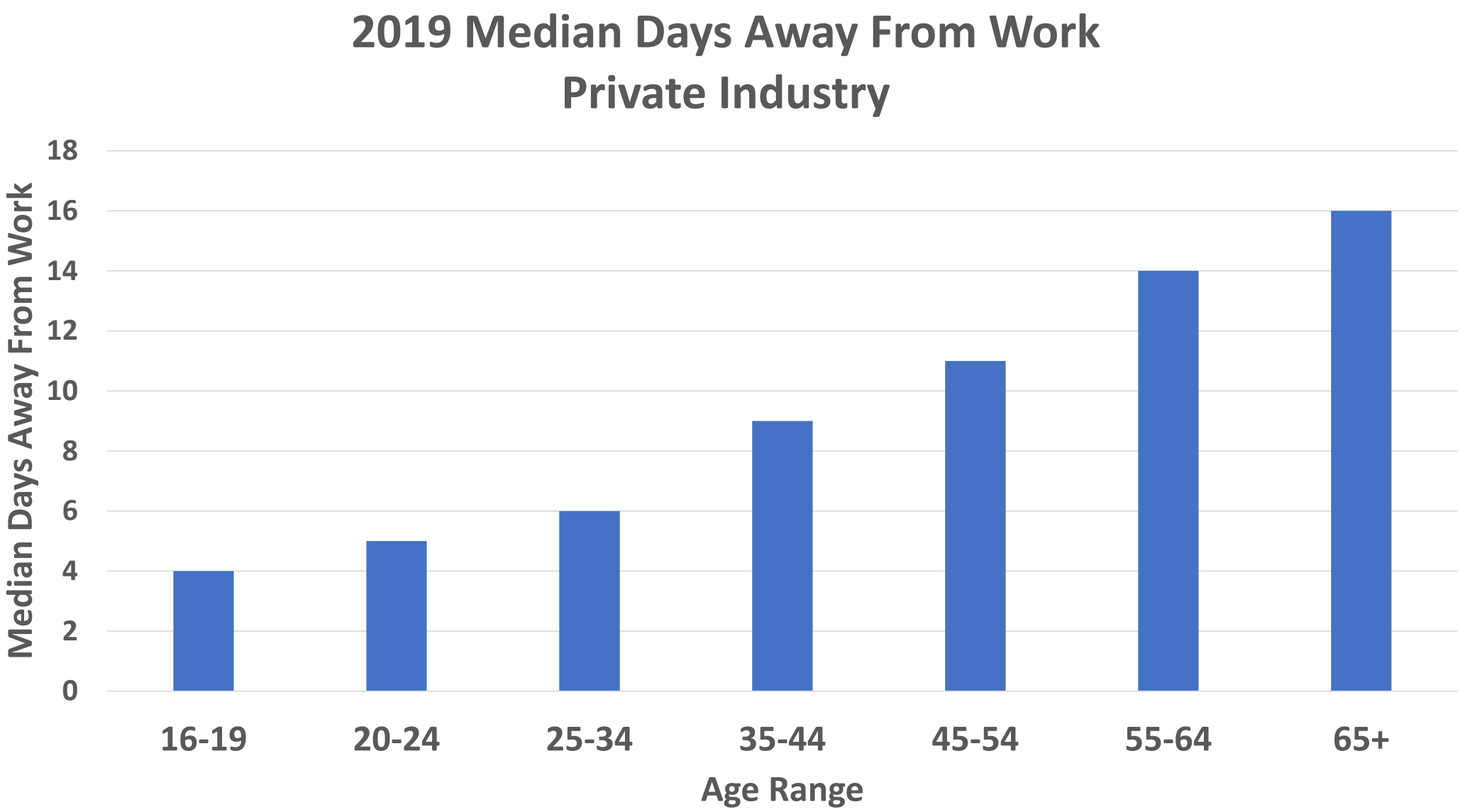


Conclusion #3:
Our negative presumptions about older worker capabilities may be exaggerated.


2018 Costs by Age as a Percent of Total WC Costs
35%
30%
25%
20%
15%
10%
5%
0%
Percent of All WC Costs
16-24
25-34
35-44
45-54
55-64
65+
Age Range

Conclusion #4:
Workers 65+ and 16-24 have the LOWEST total WC cost of all age ranges.

But don't workers 65+ take more time off when injured?

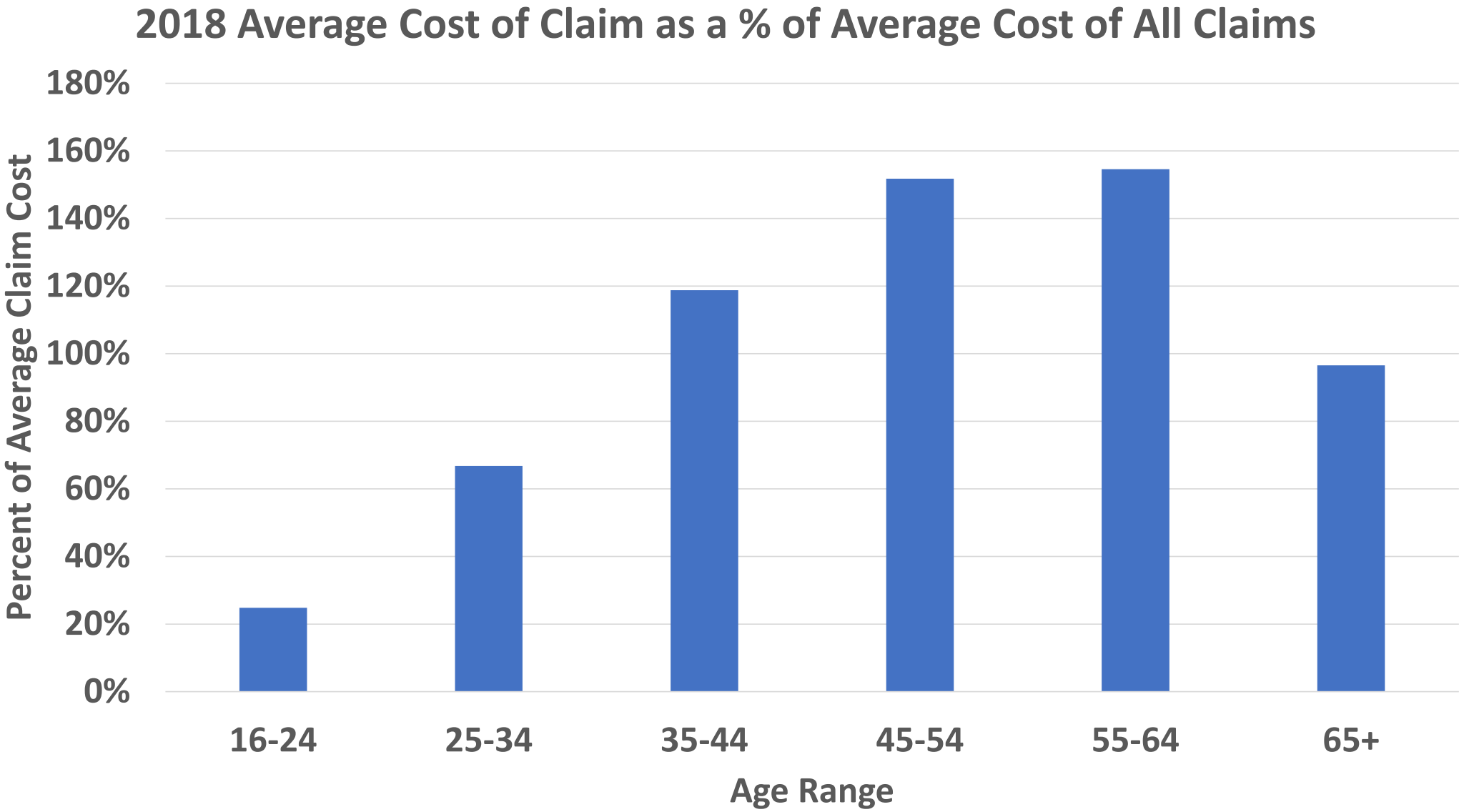

2019 Median Days Away From Work
Private Industry
Median Days Away From Work
18
16
14
12
10
8
6
4
2
0
16-19
20-24
25-34
35-44
45-54
55-64
65+
Age Range

Possible reasons 65+ have longer days away from work

- Older people take longer to heal
- Injuries that require longer to heal
- Financially more secure - Less motivation than younger workers to return to full pay
- Might feel like they're getting too old to work safely, so retire early
- Employers and medical providers may stereotype older workers as taking longer to heal, and so delay return to work

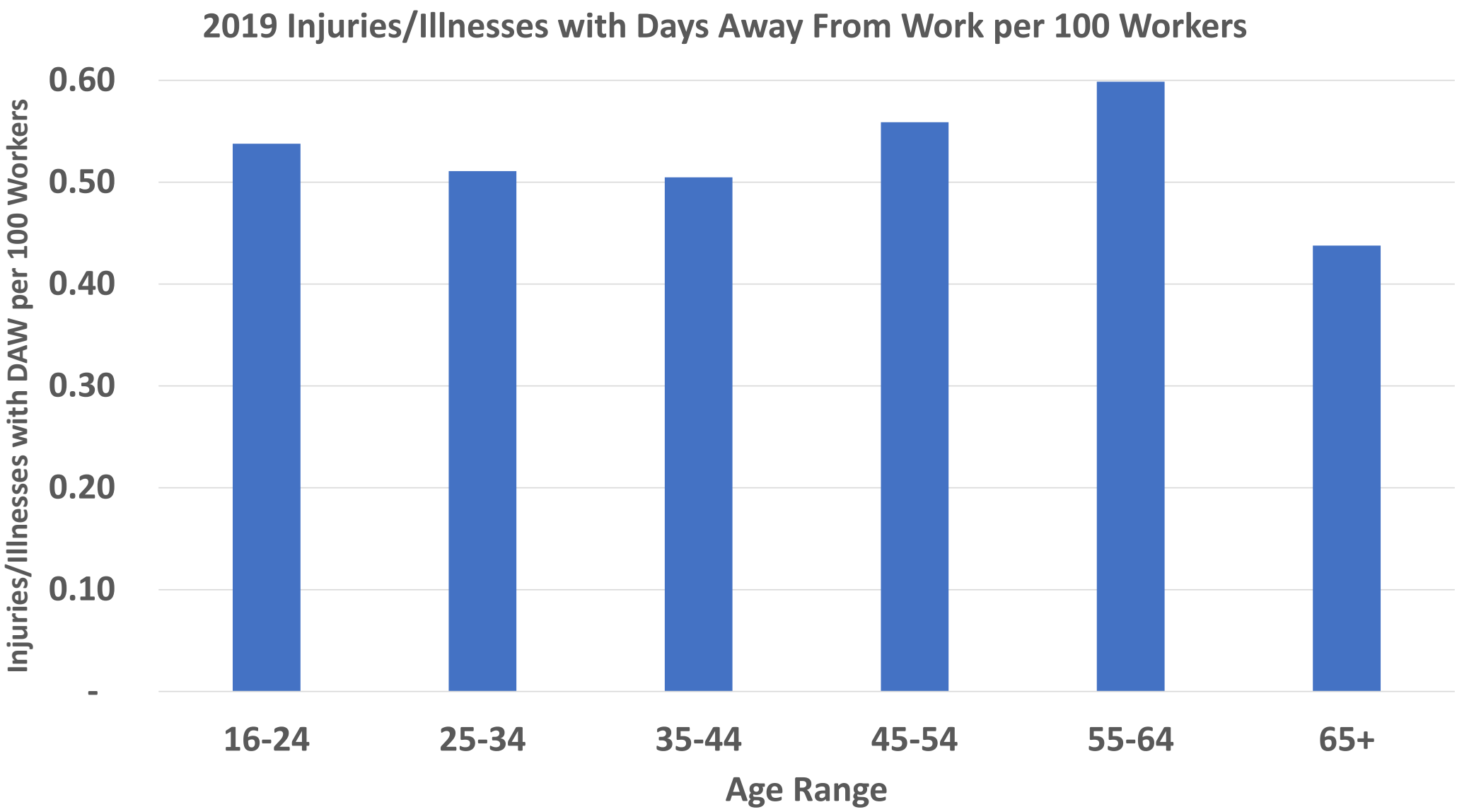
Conclusion #5:
The number of days away from work due to an injury/illness increase with age.

But… does that mean the average cost of a claim increases with age?


2018 Average Cost of Claim as a % of Average Cost of All Claims
Percent of Average Claim Cost
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
16-24
25-34
35-44
45-54
55-64
65+
Age Range

Conclusion #6:
The average cost of a claim due to an injury/illness increases with age, BUT NOT FOR WOKERS 65+

What about the RATE of injuries by age range?

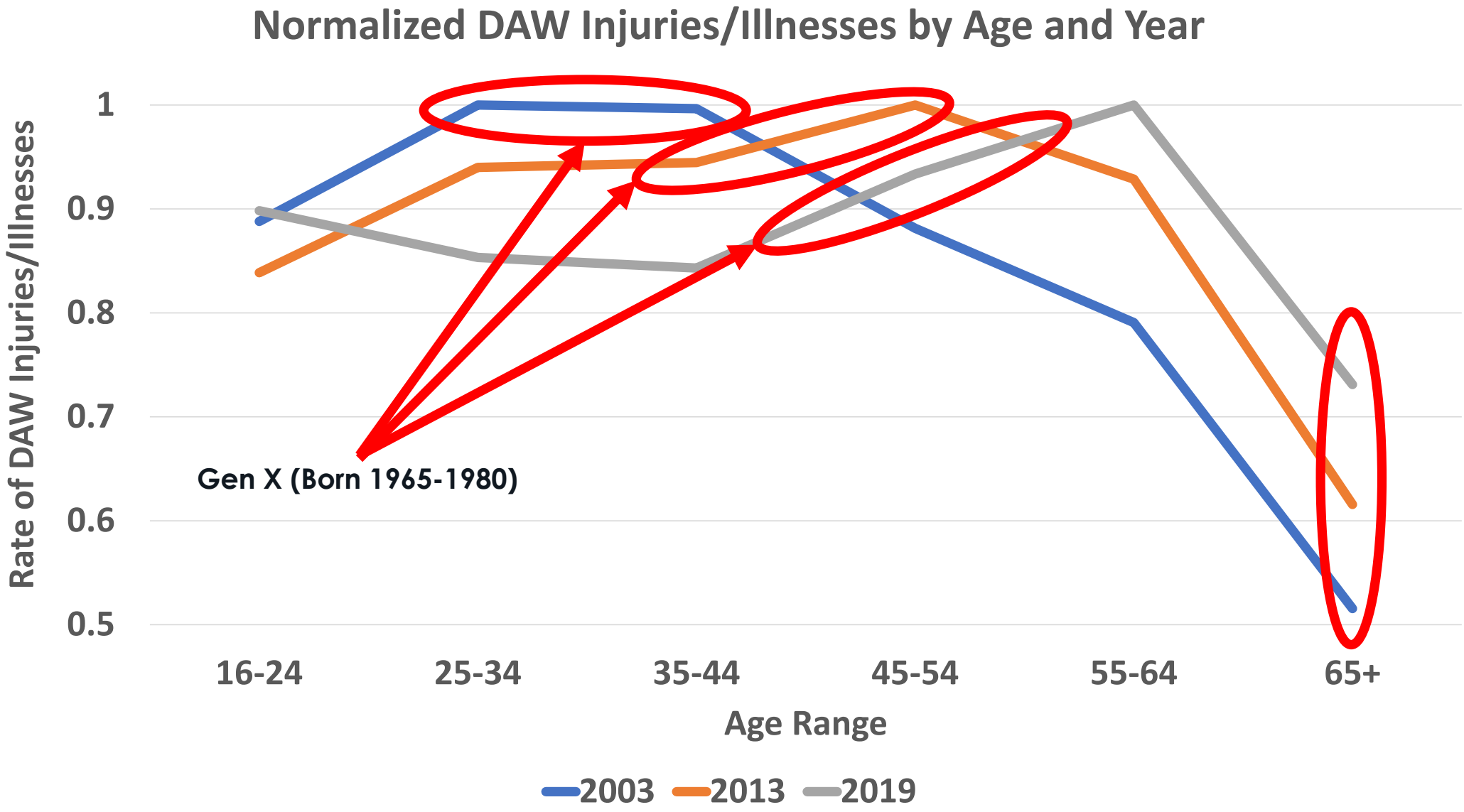

2019 Injuries/Illnesses with Days Away From Work per 100 Workers
Injuries/Illnesses with DAW per 100 Workers
0.60
0.50
0.40
0.30
0.20
0.10
-
16-24
25-34
35-44
45-54
55-64
65+
Age Range

Conclusion #7:
The rate of injuries/illnesses w/DAW is HIGHEST for workers aged 45-64, but LOWEST for workers 65+

Why?

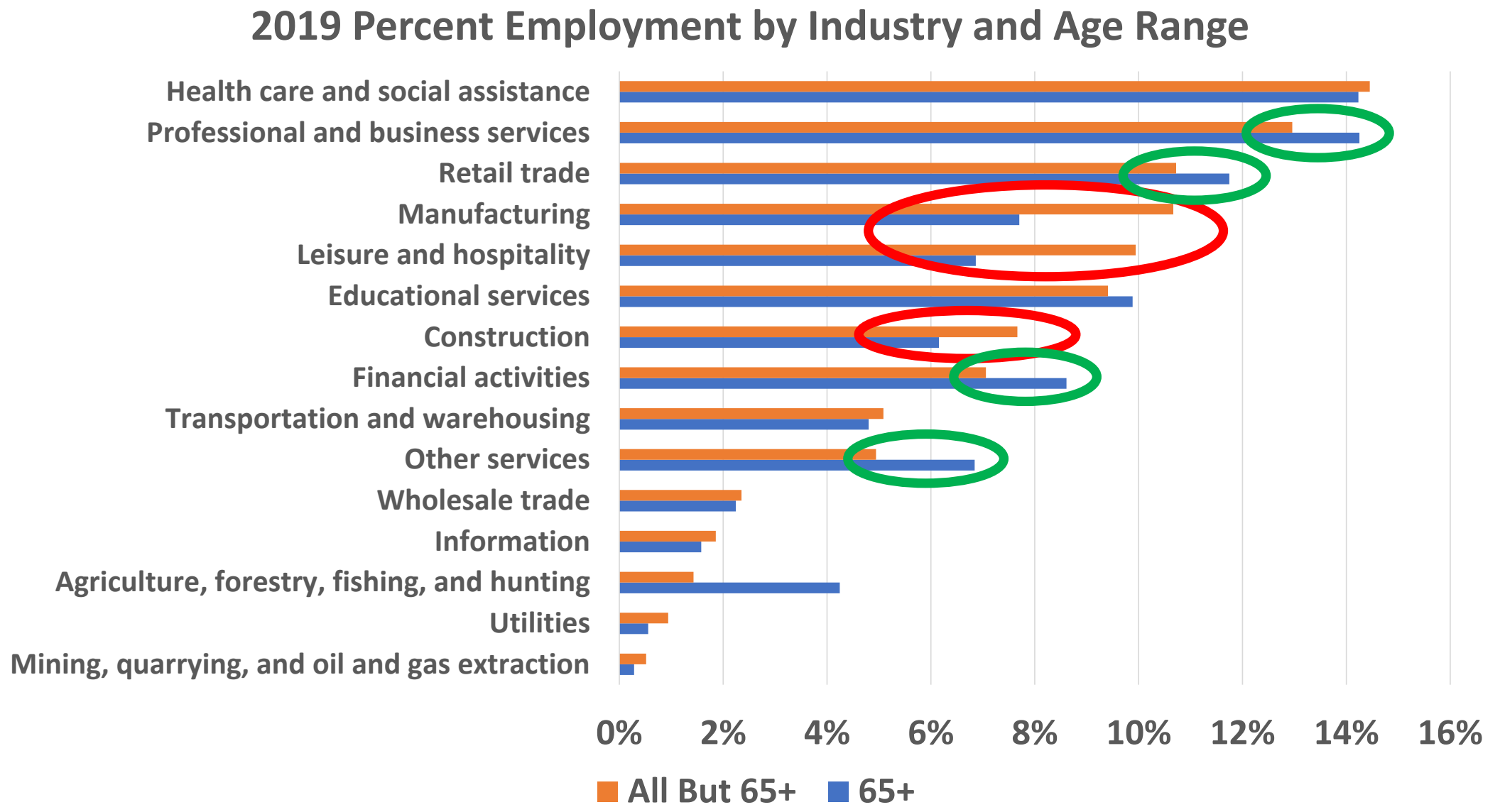
Possible reasons for higher 45-64 rates and lower rates among 65+

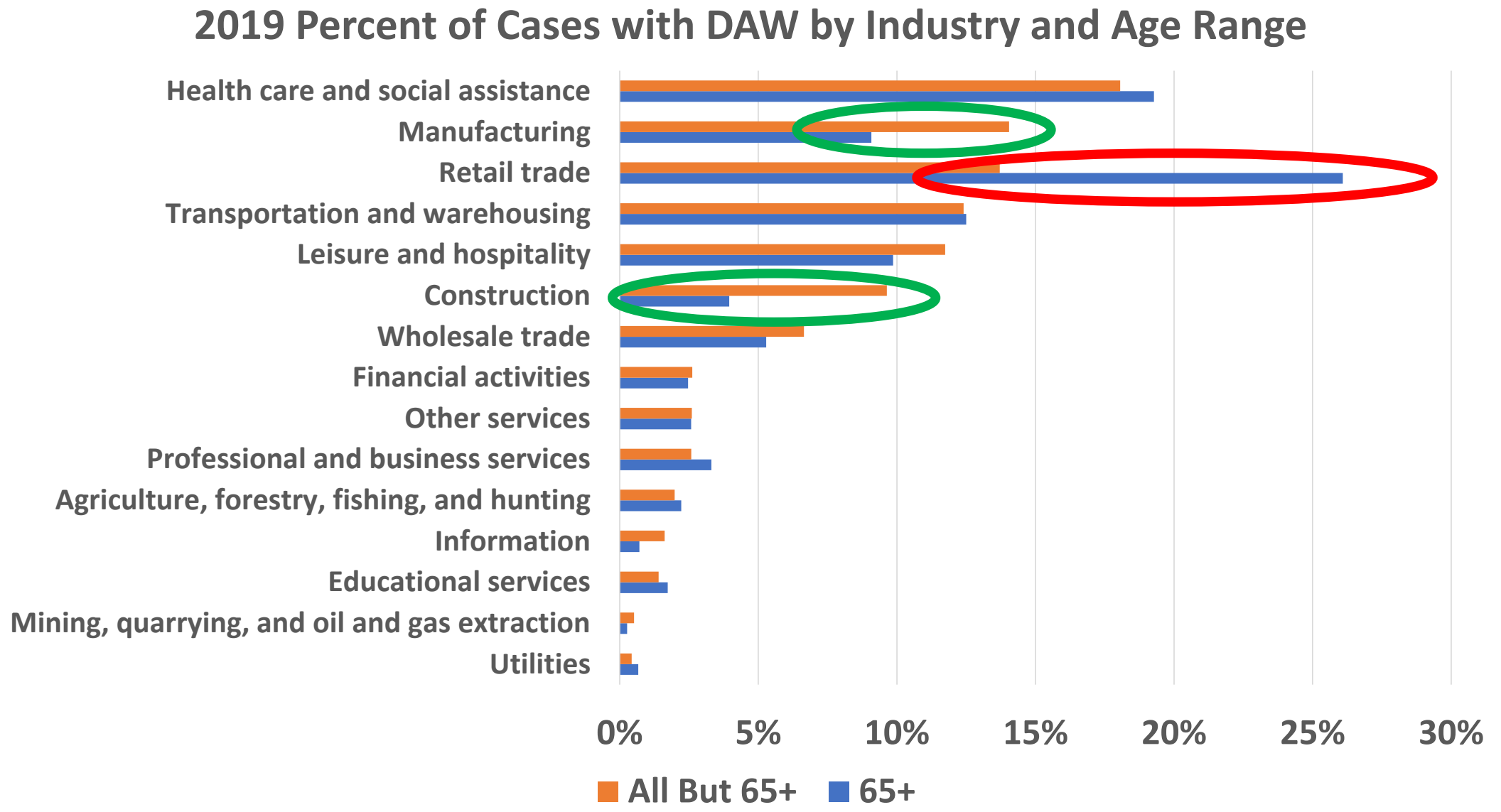
- A specific age "cohort" effect?


Normalized DAW Injuries/Illnesses by Age and Year
Rate of DAW Injuries/Illnesses
1
0.9
0.8
0.7
0.6
0.5
Gen X (Born 1965-1980)
16-24
25-34
35-44
45-54
55-64
65+
Age Range
2003
2013
2019

Possible reasons for higher 45-64 rates and lower rates among 65+

- A specific age "cohort" effect?
- A shift in which industries 65+ workers are working **and** being injured?

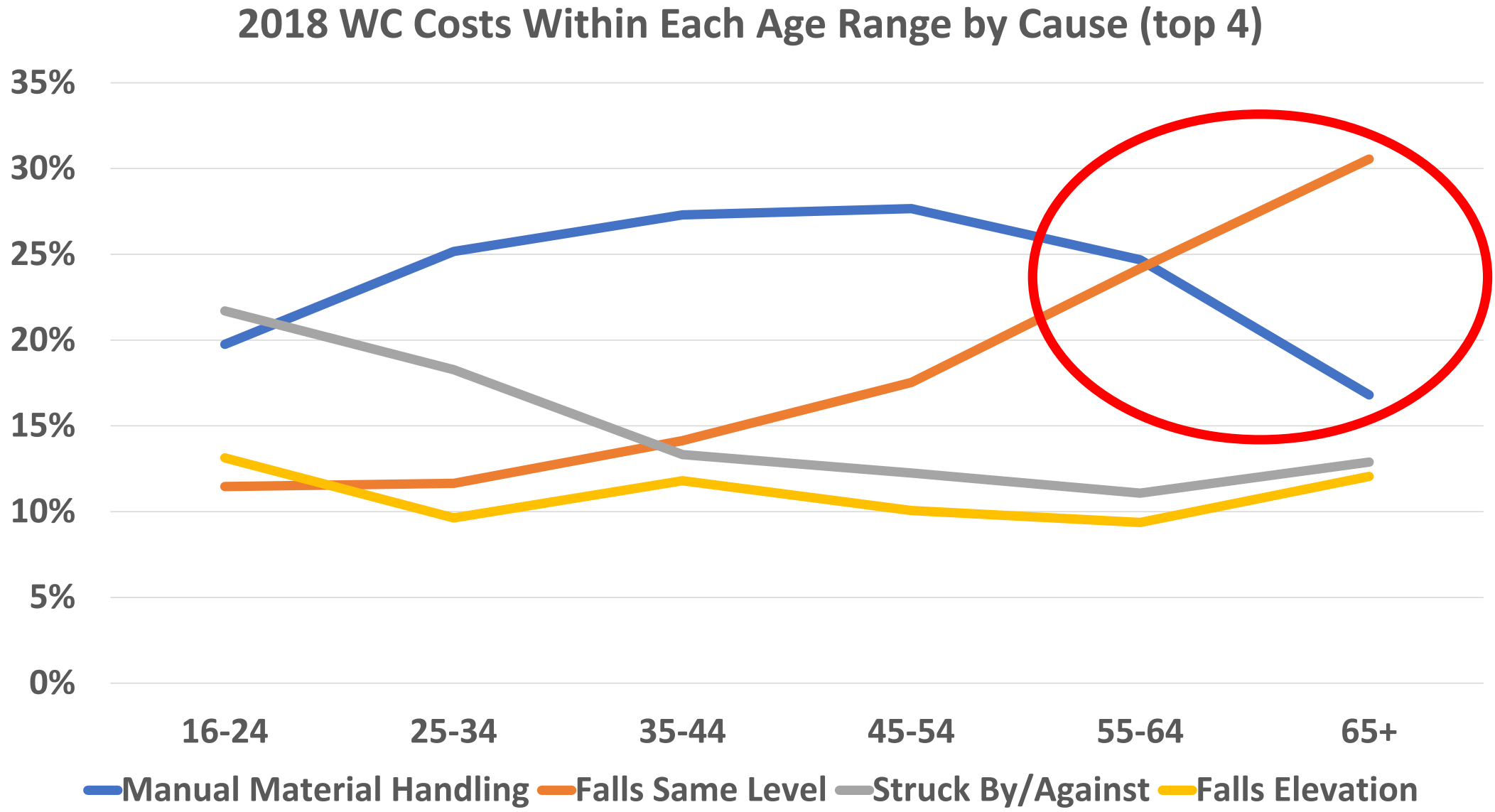

2019 Percent Employment by Industry and Age Range
Health care and social assistance
Professional and business services
Retail trade
Manufacturing
Leisure and hospitality
Educational services
Construction
Financial activities
Transportation and warehousing
Other services
Wholesale trade
Information
Agriculture, forestry, fishing, and hunting
Utilities
Mining, quarrying, and oil and gas extraction
0%
2%
4%
6%
8%
10%
12%
14%
16%
All But 65+
65+


2019 Percent of Cases with DAW by Industry and Age Range
Health care and social assistance
Manufacturing
Retail trade
Transportation and warehousing
Leisure and hospitality
Construction
Wholesale trade
Financial activities
Other services
Professional and business services
Agriculture, forestry, fishing, and hunting
Information
Educational services
Mining, quarrying, and oil and gas extraction
Utilities
0%
5%
10%
15%
20%
25%
30%
All But 65+
65+

Possible reasons for higher 45-64 rates and lower rates among 65+

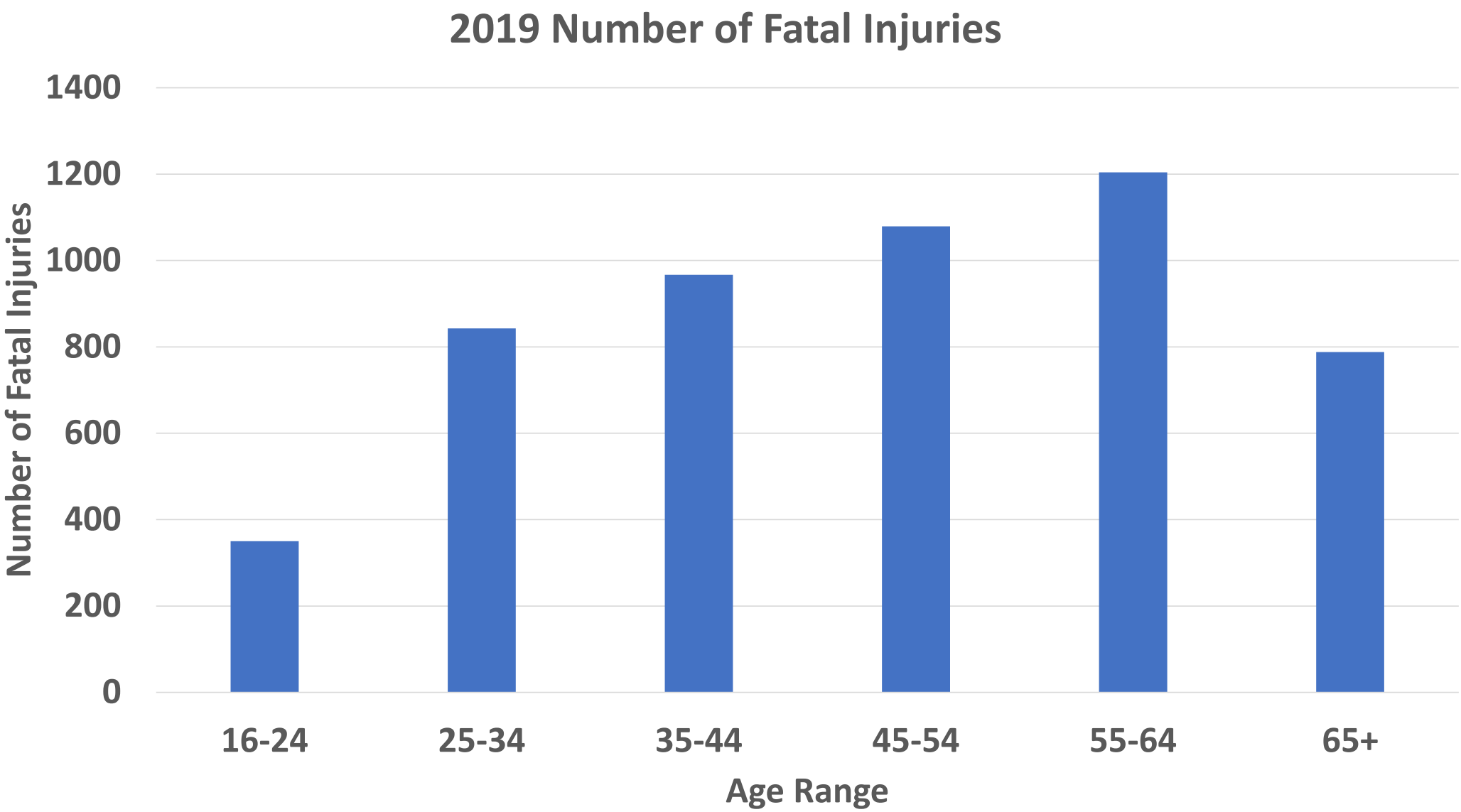
- A specific age "cohort" effect?
- A shift in which industries 65+ workers are working and being injured?
- A shift in which jobs/roles workers 65+ are working?

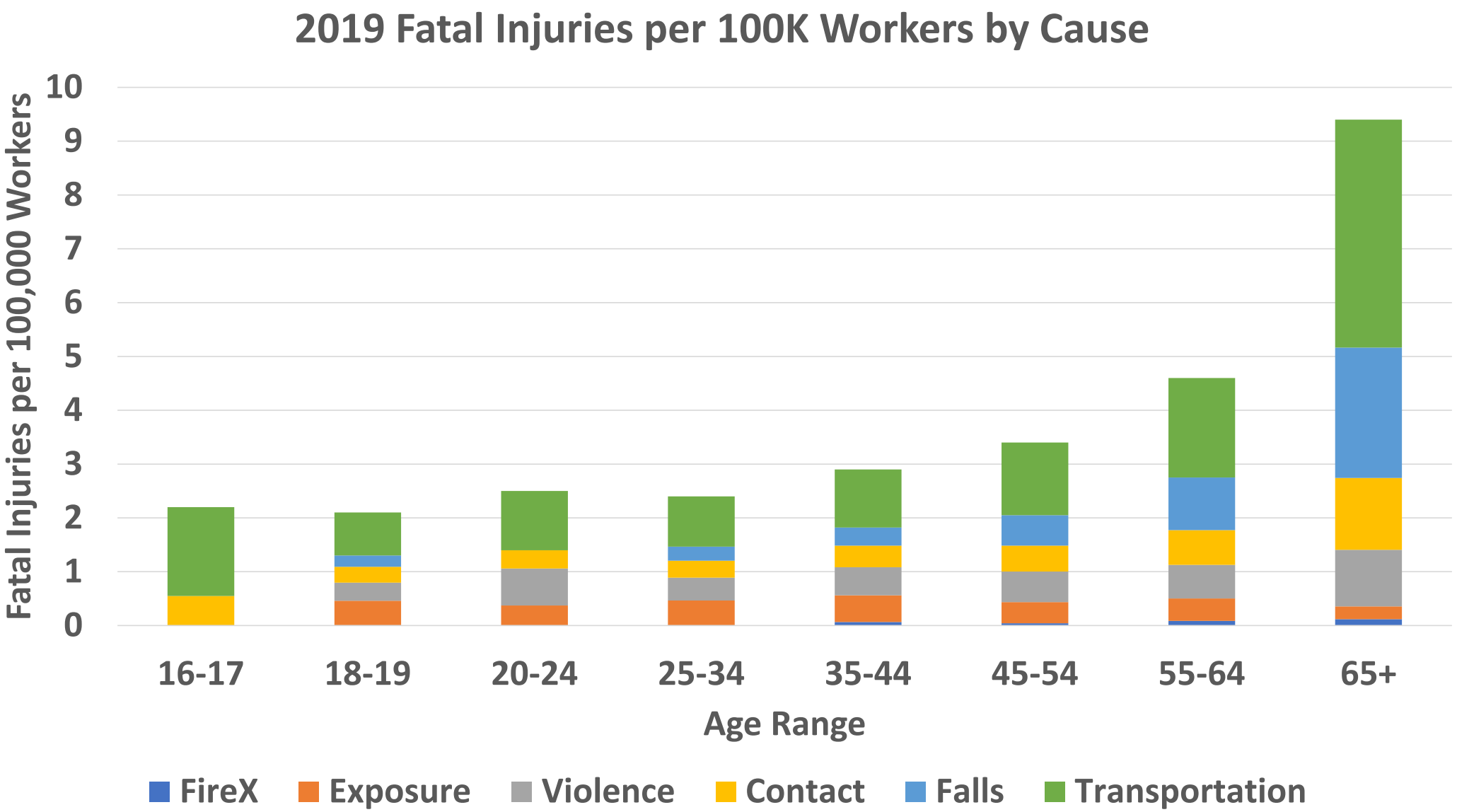
What about the causes of injuries to workers 65+?


2018 WC Costs Within Each Age Range by Cause (top 4)
35%
30%
25%
20%
15%
10%
5%
0%
16-24
25-34
35-44
45-54
55-64
65+
Manual Material Handling
Falls Same Level
Struck By/Against
Falls Elevation

Conclusion #8:
The cost driver for older (60+) workers is same-level FALLS.

What about fatal workplace injuries/illnesses?


2019 Number of Fatal Injuries
1400
1200
1000
800
600
400
200
0
Number of Fatal Injuries
16-24
25-34
35-44
45-54
55-64
65+
Age Range


2019 Fatal Injuries per 100K Workers by Cause
Fatal Injuries per 100,000 Workers
10
9
8
7
6
5
4
3
2
1
0
16-17
18-19
20-24
25-34
35-44
45-54
55-64
65+
Age Range
FireX
Exposure
Violence
Contact
Falls
Transportation

Conclusion #9:
Workers 65+ have a MUCH HIGHER rate of fatalities than any other age range, driven mostly by transportation-related events (vehicle crashes) and falls.

What to do with what we know:

What We Know	What We Can Do
1. The ***population*** is aging, ***workforce*** not as much.	1. Analyze your actual losses Keep perspective Focus on loss drivers Evaluate your retirement plan
2. Oldest workers have lower WC costs, and are healthier and happier than non-workers their age	2. Retain older workers!
3. Physical Declines	3. Design jobs within capabilities of ALL workers
4. Chronic Health Issues	4. Accommodate; Provide Good Group Health
5. Less incentive to RTW	5. Extra effort to RTW
6. Increased Falls	6. Control Falls
7. Increased driving risk	7. Diligent fleet safety effort

Improvements Worth the Effort

- **Falls – Be Obsessive:**
  - ¼" OK for most, NOT For 65+
  - Make Stairs Textbook Perfect
  - Make Spills a Myth
  - Increase lighting
- **Falls – Be Informed:**
  - **Slip resistant shoes** cut the slipping rate in **half**.
  - **Contaminated floors** increase slipping rate by **15 times!**
  - Each 0.1 increase in the static coefficient of friction decreases the slipping rate by 21% - **flooring materials matter!**

https://commons.wikimedia.org/

Sources:

- Chang, W.R., Leclercq, S., Lockhart, T.E. and Haslam, R., 2016. State of science: occupational slips, trips and falls on the same level. *Ergonomics*, *59*(7), pp.861-883.
- Verma, S.K., Chang, W.R., Courtney, T.K., Lombardi, D.A., Huang, Y.H., Brennan, M.J., Mittleman, M.A., Ware, J.H. and Perry, M.J., 2011. A prospective study of floor surface, shoes, floor cleaning and slipping in US limited-service restaurant workers. *Occupational and environmental medicine*, *68*(4), pp.279-285.

Flooring materials matter!

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Unsealed Brushed Concrete

Quarry Tile with Embedded Grit

Textured Glazed Ceramic Tile with Raised Points

Carpeting

Excellent to Good Slip Resistance, BOTH Wet and Dry

Textured Porcelain Pavers

Quarry Tile withOUT Embedded Grit

Textured Rubber Tiles or Sheets

Good Slip Resistance Dry, Fair Wet

Terrazzo

Diamond Plate

Hardwood Floors

Vinyl Composition Tile (also Glazed ceramic or porcelain)

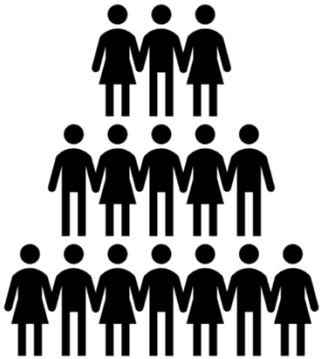
Good to Fair Slip Resistance Dry, <u>Poor</u> Wet

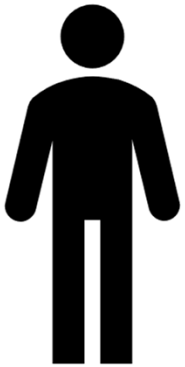
Driving Considerations

- MVRs (Samba Safety)
- Telematics
- Driver Assistance Tech (NHTSA)
- Sleep
  - Work Schedule
  - Sleep Apnea
  - Personal/Wearable Monitors
- Vision – How do you know workers are getting proper correction? Implications for both driving AND falls

Beware of Ageism; Be Proactive

- Ageist policies → decreased performance, engagement, job satisfaction and increased turnover and overhead **costs**
- You **DON'T** want attention from the EEOC (Equal Employment Opportunity Commission)
- Resist generational labeling and stereotyping
- Critically examine hiring practices for age bias (e.g., remove dates)
- Make training and advancement available to **all age ranges**
- Avoid age-focused interventions
- **Address INDIVIDUAL performance**
- **Resist generalizing** an age group because of one individual's behavior
- Design, introduce, and achieve **VOLUNTARY retirement** through attractive offers!
- **Migrate** skilled workers from demanding jobs to mentoring, supervision, & training roles
- **Anticipate** retirements and hire replacement workers EARLY so they can be mentored by retiring workers BEFORE retirement.
- Keep communication open with HR and Legal.





Three Problems with Negative Perspectives

Negative perspectives on older workers can:

1. Focus attention away from hazard reduction, management responsibility, and program development.
2. Lead to perceptions that older workers cannot be returned to modified work effectively, leading to prolonged disability.
3. Lead to self-perceptions by older workers that they are getting too old to do the job safety, and thus prolong disability (or lose them from the workforce altogether).

EPIC

Two Tools for Evaluating Perspectives

Older Worker Friendly Employer Assessment Tool
www.wisconsinjobcenter.org/ow/ow_er_assessment.pdf

AARP Workforce Assessment Tool (administered by Boston College)
http://virgo.bc.edu/employerbenchmarking/survey#terms

Recommended Reading

- Brogmus, G.E., 1991, September. Effects of age and sex on speed and accuracy of hand movements: And the refinements they suggest for Fitts' Law. In Proceedings of the Human Factors Society Annual Meeting (Vol. 35, No. 3, pp. 208-212). Sage CA: Los Angeles, CA: SAGE Publications.
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- Fox, R.R., Brogmus, G.E. and Maynard, W.S., 2015. Aging workers & ergonomics: A fresh perspective. Professional Safety, 60(01), pp.33-41.
- National Academies of Sciences, Engineering, and Medicine, 2022. Understanding the aging workforce: Defining a research Agenda.
- Ng, T.W. and Feldman, D.C., 2008. The relationship of age to ten dimensions of job performance. Journal of applied psychology, 93(2), p.392.
- Petery et al., 2023. Clearing up myths about older workers while understanding and supporting an aging workforce. https://blogs.cdc.gov/niosh-science-blog/2023/09/25/older-workers/
- See story of Howard Stapleton, Inventor of the Mosquito https://www.npr.org/templates/story/story.php?storyId=129581152
- Toossi, M., 2012. Projections of the labor force to 2050: a visual essay. Monthly Lab. Rev., 135, p.3.
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- Verma, S.K., Chang, W.R., Courtney, T.K., Lombardi, D.A., Huang, Y.H., Brennan, M.J., Mittleman, M.A., Ware, J.H. and Perry, M.J., 2011. A prospective study of floor surface, shoes, floor cleaning and slipping in US limited-service restaurant workers. Occupational and environmental medicine, 68(4), pp.279-285.
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Upcoming Webinars

November 7, 2023	**Indoor Heat Illness Prevention** • **The Recipe for Heat Illnesses** • **Elements of the Proposed Standard(s)** • **Sample Policy Wording - be Prepared**
December 5, 2023	This Might Hurt – An Introduction to Back Pain • What causes back pain? • How effective is treatment? • Can it be prevented? • Some "new" thinking
January 10, 2024	Wearables – What to Watch & Watch Out For • The challenge with technology • Challenging assumptions • Buyer Beware
February 6, 2024	What Predicts Occupational Length of Disability? • Traditions • Complexity • The Key
March 5, 2024	Impact of Work Scheduling on Risk • It's worse than you think • Assessing your organization's risk • What can be done?

Other EPIC Upcoming Webinars

October 18, 2023 **11:00 AM -Noon PST**	**Employment Law Update** Tackling Issues Plaguing Employers in 2023 with Beth Schroeder @ Raines Feldman
October 26, 2023 **10:00-11 AM PST**	**Benefits Curve: Insights to Action Webinar Series** Robyn Pawlo Moderates a discussion with Renee Bosley on Benefits Captives & Dan Grelecki will also present ICHRAs
November 16, 2023 **11:00 AM -Noon PST**	**2023 Compliance Webinars** Fiduciary Responsibilities Under the CAA & Gag Clause Prohibition

Questions