Still Working Hard: An Update on the Share of Older Workers in Physically Demanding Jobs

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Acknowledgements

The authors thank Richard W. Johnson and his colleagues at the Urban Institute, as well as Hye Jin Rho for creating and then adapting the programs for implementing the O*NET-CPS matching that are used in this paper. The authors also thank Alan Barber, Kevin Cashman, and Tillie McInnis for helpful comments.

Executive Summary

A recurring theme in debates over Social Security policy is that workers should be encouraged to work later into their lives by raising the age at which they can get full benefits. Implicit in this argument is that most workers are in a situation where they would be able to work to an older age; however, many older workers stop working because they can no longer meet the physical demands of their job.

In 2010, CEPR did an analysis¹ that examined the percentage of older workers (ages 58 and over) who either worked in physically demanding jobs or in difficult work conditions. This paper is an update of that earlier study and is based on data from 2014.

Using data from the Current Population Survey (CPS) and Occupational Information Network (O*NET) it finds that in 2014, 8.0 million workers ages 58 and older (34.5 percent) had physically demanding jobs, while 5.1 million workers ages 58 and older (22.1 percent) had jobs with difficult working conditions. About 10.2 million workers ages 58 and older (43.8 percent) were employed either in physically demanding jobs or jobs with difficult working conditions. The workers who were most likely to be in these jobs were Latinos, the least educated (less than a high school diploma), immigrants, and the lowest wage earners.

Physically demanding jobs include general physical activities, handling and moving objects, spending significant time standing, walking or running, making repetitive motions, or having any highly physically demanding work. Highly physically demanding jobs require dynamic, explosive, static, or trunk strength, bending or twisting of the body, stamina, maintaining balance, or kneeling or crouching. Difficult working conditions include working in a cramped workspace, labor outdoors, or exposure to abnormal temperatures, contaminants, hazardous equipment, whole body vibration, or distracting or uncomfortable noise.

¹ Rho (2010).

The study also finds:

- 37.0 percent of male workers ages 58 and older had jobs that involved any general physical demand, as did 31.7 percent of female workers. These percentages have changed little since 2009, although the absolute numbers have increased since more older people are now working.
- 51.0 percent of older Latino workers had physically demanding jobs, with 9.1 percent having jobs with high physical demands. By comparison, the percentages for Blacks were 38.9 percent and 4.3 percent, respectively and for White workers 31.8 percent and 2.8 percent.
- Older workers with less than a high school diploma had the highest share of workers in
 physically demanding jobs, with 68.4 percent in jobs with some physical demands and 12.8
 percent in jobs with high physical demands. In contrast, only 22.7 percent of workers with a
 college degree were in physically demanding jobs, and 1.4 percent were in jobs with high
 physical demands.
- 46.6 percent of immigrant workers ages 58 and older had physically demanding jobs, compared to 32.7 percent for non-immigrant workers.
- 54.8 percent of older workers in the bottom wage quintile had physically demanding jobs compared to 16.2 percent of those in the top quintile. The share in jobs with high physical demands was 6.4 percent for the bottom quintile and just 1.7 percent for those in the top quintile.

Introduction

Raising the age at which workers qualify for full Social Security benefits is an often repeated theme in policy circles. Several of the Republican presidential candidates have advocated raising the age for full benefits. Some Democrats have also indicated an interest in this policy. Erskine Bowles and Alan Simpson proposed raising both the age for full benefits and the age for claiming early benefits in their report as co-chairs of President Obama's deficit commission.² These proposals have earned praise from both liberal and conservative commentators.

The implicit, and often explicit, assumption behind proposals for raising the ages when workers can get full and/or early Social Security benefits is that workers can easily work later in life than the current early and normal retirement ages. Proponents note both the increases in longevity since Social Security's inception, and also a shift away from jobs in factories and construction that are physically demanding.

There are important class dimensions to both parts of this story. The increase in longevity has gone disproportionately to higher income earners.³ For workers in the bottom half of the wage distribution, the increases in the age for receiving full benefits that are already in law will be roughly equal to their projected increase in life expectancy at age 65 since 1970.

There is also a substantial class dimension to the type of work done by older workers. An earlier study found that in 2009, more than 45 percent of all workers over the age of 58 did work that was either physically demanding or in difficult work conditions, such as working outside all day. Among workers with just a high school degree this percentage was almost 60 percent, and for workers without a high school degree the percentage in physically demanding jobs or in difficult work conditions was near 80 percent. By contrast, for those with a college degree the percentage was just about 34 percent. There were similar divides by wage quintiles and also sharp differences across racial and ethnic groups.

² Bowles and Simpson (2010).

³ Rosnick and Baker (2012) and Buffie (2016).

⁴ Rho (2010).

This paper is an update of the analysis in Rho (2010). There have been substantial changes in the labor market during the recovery from the Great Recession. With discussion of plans to raise the ages of eligibility for Social Security again appearing in policy debates, it is worth examining the extent to which the findings from the 2010 study still hold. This paper compares the findings on the percentages of older workers in physically demanding jobs or difficult work conditions in 2014 with the percentages found in the 2010 study.

The paper uses data from the 2014 Current Population Survey Outgoing Rotation Group (CPS ORG) together with occupational classifications from the Occupational Information Network (O*NET) database by the US Department of Labor/Employment and Training Administration. A full description of the methodology and data sources can be found in Rho (2010). This paper uses the latest O*NET data (version 20.1) available as of November 2015.

Older Workers and Physically Demanding Jobs

The first comparison looks at changes in the overall share of employed people over age 58 who are in physically demanding jobs or in difficult work conditions. **Table 1a** shows the overall shares and the shares by more narrow age groupings for 2014 while **Table 1b** shows the shares for 2009. (The same data, for 2014, are shown in **Figure 1**.) There was almost no change in the share who work at jobs classified as physically demanding either overall or in any of the more narrow age brackets. However there was a drop in the percentage that is classified as working in occupations that have high physical demands. This share for older workers as a whole fell from 5.1 percent in 2009 to just 3.6 percent in 2014. While this is not a large drop in percentage terms, it does mean that older workers were substantially less likely to be employed in an occupation with high physical demands in 2014 than in 2009. The falloff was sharpest among older age cohorts, with the share of workers between the ages of 66–69, and over age 70 employed in occupations with high physical demands dropping 2.6 and 2.5 percentage points, respectively.

This paper relies on definitions first used by Johnson, Mermin, and Resseger (2007), and later Rho (2010). Physically demanding jobs include those that require significant time standing, walking, running, handling and moving objects, making repetitive motions, or performing general physical activities. Highly physically demanding jobs are those that require dynamic, explosive, static, or trunk strength, stamina, bending or twisting of the body, kneeling, crouching, stooping or crawling, reaction time, or maintaining balance. Difficult work conditions include cramped workspace, exposure to contaminants, hazardous conditions, hazardous equipment, very hot or cold temperatures, whole body vibration, working outdoors, working indoors without environmental controls, or working with distracting or uncomfortable noise levels.

TABLE 1a

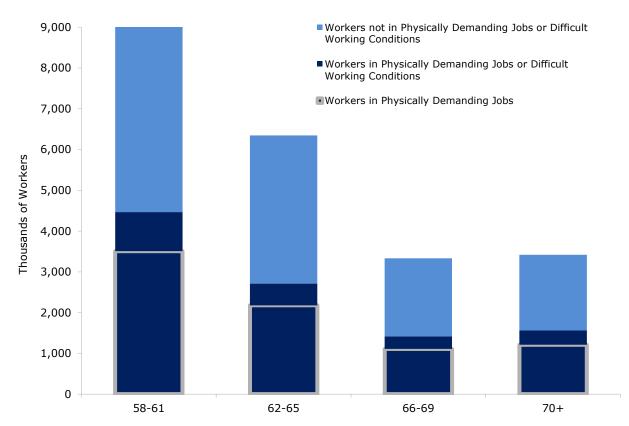
TABLE 18	•									
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2014, Ages 58+										
	Number of Workers (thousand)	Number of Workers (thousand) Physical Demand (PD)		Difficult Work Conditions (DWC)	PD or DWC	Employment Rate (%)				
	(diododiia)	Any	High	(%)	(/3)	Tauce (73)				
All (58+)	23,186	34.5	3.6	22.1	43.8	32.3				
58-61	10,091	34.7	3.9	23.3	44.2	62.9				
62-65	6,347	34.3	3.7	21.0	42.7	45.3				
66-69	3,331	33.3	3.2	20.6	42.5	28.2				
70+	3,417	35.4	2.9	22.5	45.7	11.5				
Source and	l notes: Authors' analysis	of the Occi	apational Info	rmation Network (O*N	NET 20.1) and C	EPR extract of				

Source and notes: Authors' analysis of the Occupational Information Network (O*NET 20.1) and CEPR extract of 2014 Current Population Survey Outgoing Rotation Group (CPS ORG) data.

TABLE 1b

(thousand)	Λ		Conditions (DWC)	PD or DWC	Employment Rate (%)
	Any	High	(%)	<u> </u>	
<i>All (58+)</i> 18,799	34.8	5.1	26.8	45.3	30.9
<i>58–61</i> 8,617	34.4	5.0	26.5	44.5	61.3
<i>62–65</i> 5,011	34.7	4.9	25.6	44.8	43.8
<i>66–69</i> 2,470	35.2	5.8	27.1	45.8	26.9
70+ 2,701	35.8	5.4	29.5	48.2	10.3

FIGURE 1
Workers in Physically Demanding Jobs or Difficult Working Conditions in 2014, Ages 58+



Source and notes: Authors' analysis of the latest Occupational Information Network (O*NET 20.1) and CEPR extract of 2014 Current Population Survey Outgoing Rotation Group (CPS ORG) data.

There was also a substantial decline in the share of older workers who worked in occupations that exposed them to difficult work conditions. Overall the share declined from 26.8 percent in 2009 to 22.1 percent in 2014. Here also, the declines were sharpest among the older age cohorts. The drop was from 29.5 percent to 22.5 percent for workers over age 70 and from 27.1 percent to 20.6 percent for workers between the ages of 66–69.

Taken together, there was a modest decline in the share of workers over age 58 that either worked in a physically demanding occupation or in an occupation that exposed them to difficult work conditions. This share fell from 45.3 percent in 2009 to 43.8 percent in 2014. The sharpest drop was in the 66–69 cohort, with the share falling from 45.8 percent in 2009 to 42.5 percent in 2014.

It is worth noting that these changes are probably not driven by changes in employment rates for older workers. The overall employment rate has risen by 1.4 percentage points for workers over age 58, which is not large enough to have much impact on the distribution of employment, except for

the oldest cohort. However, since the absolute number of workers has risen substantially over this period, as the baby boom cohorts reach these ages, the absolute number of older workers in physically demanding jobs or in difficult work conditions has increased substantially over this five year period (from 8.5 million in 2009 to 10.2 million in 2014).

Tables 2a and **2b** list the fifteen most common physically demanding occupations in 2014 and 2009. As can be seen, there is little change in the list with the first six occupations being the same in both periods. The biggest new entry to the list is personal and home care aids, which accounted for 1.1 percent of employed older workers in 2014, enough to make it the seventh most common occupation.⁶

In 2014, three occupations were considered highly physically demanding (janitors and building cleaners, maids and housekeeping cleaners, and grounds maintenance workers). Seven occupations were considered to have difficult work conditions (driver/sales workers and truck drivers, grounds maintenance workers, cooks, carpenters, farmers, ranchers and other agricultural managers, construction laborers, and hairdressers).

TABLE 2a

		+, 2014				
Rank	Physically Demanding (PD) Occupations	PD Any High		(PD) Occupations PD DWC Any High		Share of workers (%)
1	First-line supervisors/managers of retail sales workers	√ V	111811		2.3	
2	Retail salespersons				2.2	
3	Janitors and building cleaners	$\sqrt{}$	$\sqrt{}$		2.2	
4	Elementary and middle school teachers				1.3	
5	Cashiers				1.3	
6	Maids and housekeeping cleaners				1.1	
7	Personal and home care aides	$\sqrt{}$			1.1	
8	Driver/sales workers and truck drivers			$\sqrt{}$	0.9	
9	Laborers and freight, stock, and material movers, hand	$\sqrt{}$			0.8	
10	Grounds maintenance workers	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	0.8	
11	Cooks	$\sqrt{}$		$\sqrt{}$	0.7	
12	Carpenters	$\sqrt{}$		$\sqrt{}$	0.7	
13	Farmers, ranchers, and other agricultural managers	$\sqrt{}$		$\sqrt{}$	0.7	
14	Construction laborers	V		V	0.6	
15	Hairdressers, hairstylists, and cosmetologists	$\sqrt{}$		$\sqrt{}$	0.5	
Rest of (Occupations, Total				17.4	
Total S	Share of Workers Aged 58+ in Physically Demanding Oc	cupation	s		34.5	

Source and notes: Authors' analysis of O*NET 20.1 and CEPR extract of 2014 CPS ORG data. PD refers to Physically Demanding; DWC refers to Difficult Working Conditions.

⁶ The ratings in the O*NET database are updated with each new release. The ratings in version 20.1 (2014) may be different from those in version 14.0 (2009), representing changing job demands for those occupations.

TABLE 2b

Rank	Physically Demanding (PD) Occupations	P	D	DWC	Share of workers (%)
		Any	High		(, -)
1	First-line supervisors/managers of retail sales workers	$\sqrt{}$			2.5
2	Retail salespersons	$\sqrt{}$			2.4
3	Janitors and building cleaners	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	2.1
4	Elementary and middle school teachers				2.0
5	Cashiers	$\sqrt{}$		$\sqrt{}$	1.3
6	Maids and housekeeping cleaners		$\sqrt{}$		1.0
7	Customer service representatives	$\sqrt{}$			0.8
8	Driver/sales workers and truck drivers			$\sqrt{}$	0.8
9	Cooks	$\sqrt{}$		$\sqrt{}$	0.8
10	Laborers and freight, stock, and material movers, hand	$\sqrt{}$		$\sqrt{}$	0.8
11	Stock clerks and order fillers	$\sqrt{}$			0.6
12	Carpenters	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	0.6
13	Grounds maintenance workers	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	0.6
14	Construction laborers	$\sqrt{}$		$\sqrt{}$	0.5
15	Food service managers	$\sqrt{}$			0.5
Rest o	f Occupations, Total				17.1
Total	Share of Workers Aged 58+ in Physically Demanding Oc	ccupation	ıs		34.8
Source a	nd notes: Authors' analysis of O*NET 14.0 and CEPR extracting; DWC refers to Difficult Working Conditions.			G data. PD	refers to Physically

Demographic Composition of Workers in Physically Demanding Jobs

Tables 3a and **3b** show the breakdown of older workers in physically demanding jobs by gender, race and ethnicity, educational attainment, immigrant status, and wage quintile in 2014 and 2009, respectively. There are few noteworthy changes in these breakdowns. Men continued to account for over 62 percent of the older workers who held either physically demanding jobs or worked in difficult conditions. However their share in the latter category did rise from 76.0 percent in 2009 to 80.9 percent in 2014.

TABLE 3a
Distribution of Physically Demanding Jobs or Jobs with Difficult Working Conditions Held by Workers, Age 58+, 2014

	<u> </u>	Difficult Work Conditions (DWC)	PD or DWC
Any 8,005	High 836	5,135	10,156
57.0	57.4	80.9	62.3
43.0	42.6	19.1	37.7
71.2	60.9	74.6	72.5
9.5	10.2	9.1	9.4
12.1	20.8	10.8	11.4
6.3	6.5	4.3	5.7
0.9	1.6	1.2	1.0
12.2	21.7	12.1	11.4
	43.1	44.0	40.1
	22.3	28.2	26.2
14.1	8.4	11.6	14.3
8.6	4.5	4.1	7.9
17.9	24.8	14.8	16.8
21.4	25.5	20.4	20.0
			29.0
			24.1
			20.2
			16.5
			10.1
	Any 8,005 57.0 43.0 71.2 9.5 12.1 6.3 0.9 12.2 39.7 25.5 14.1 8.6 17.9 31.4 24.9 19.3 15.2 9.3	8,005 836 57.0 57.4 43.0 42.6 71.2 60.9 9.5 10.2 12.1 20.8 6.3 6.5 0.9 1.6 12.2 21.7 39.7 43.1 25.5 22.3 14.1 8.4 8.6 4.5 17.9 24.8 31.4 35.5 24.9 25.9 19.3 18.4 15.2 10.9 9.3 9.3	Any 8,005 836 5,135 57.0 57.4 80.9 43.0 42.6 19.1 71.2 60.9 74.6 9.5 10.2 9.1 12.1 20.8 10.8 6.3 6.5 4.3 0.9 1.6 1.2 12.2 21.7 12.1 39.7 43.1 44.0 25.5 22.3 28.2 14.1 8.4 11.6 8.6 4.5 4.1 17.9 24.8 14.8 31.4 35.5 20.4 24.9 25.9 24.0 19.3 18.4 24.3 15.2 10.9 20.9

TABLE 3b

Distribution of Physically Demanding Jobs or Jobs with Difficult Working Conditions Held by Workers, Age 58+, 2009

_		Demand (PD)	Difficult Work Conditions (DWC)	PD or DWC
N. 1 (1 1)	Any	High	· · · · ·	0.540
Number (thousands)	6,540	961	5,036	8,510
Gender (%)				
Men	56.7	62.4	76.0	62.7
Women	43.3	37.6	24.0	37.3
Race/Ethnicity (%)				
White	72.4	60.9	74.0	74.8
Black	10.2	15.8	10.0	9.6
Latino	11.5	17.8	11.5	10.2
Asian	5.2	4.6	3.7	4.6
Other	0.8	1.0	0.9	0.8
Education (%)				
Less than high school	14.4	21.2	16.5	13.6
High school	37.9	42.0	41.1	37.7
Some college	24.5	23.9	25.8	25.4
College	14.9	9.6	11.7	15.1
Advanced	8.3	3.3	5.0	8.2
Immigrants (%)	16.6	23.4	15.3	14.9
Wage Quintile (%)				
Bottom	30.6	34.4	26.0	27.9
Second	25.0	26.9	23.4	23.7
Middle	19.5	17.7	20.9	20.1
Fourth	15.7	14.6	19.2	17.4
Тор	9.2	6.5	10.6	10.9
Source and notes: Authors' anal	lysis of O*NE'	T 14.0 and CEPR	extract of 2009 CPS ORG data	ı.

Gender

Tables 4a and **4b** give a more detailed breakdown by gender of the percent of older workers in physically demanding jobs in 2014 and 2009, respectively. The data show no change overall in the percentage of older men in physically demanding jobs, although there is a sharp drop in the percentage of men in jobs with high physical demands. Overall this share fell from 6.0 percent in 2009 to 3.9 percent in 2014. The decline was sharpest for the oldest men, with the share among men ages 66 to 69 falling from 6.5 percent to 3.2 percent, and the share among men over age 70 dropping from 5.8 percent to 2.6 percent. For these age cohorts, their risk of being in a job with high physical demands was more than cut in half over this five year period.

There was also a decline in the percentage of older men working in jobs with difficult work conditions. Overall, this share dropped by 4.5 percentage points, from 38.2 percent in 2009 to 33.7 percent in 2014. Here also, the sharpest drop was among the oldest age cohorts, with a drop of 8.0 percentage points for men between the ages of 66-69 and a drop of 6.5 percentage points for men over age 70.

There was a very small decline in the percentage of older women working in physically demanding jobs from 32.2 percent in 2009 to 31.7 percent in 2014. However this small decline went along with a modest increase for workers ages 58 to 61 from 30.2 percent to 31.1 percent, and somewhat larger decreases for older workers. The drop for women over age 70 was 2.3 percentage points.

There was also a drop in the percentage of older women in jobs with high physical demands, but the decline was smaller than for men. As a result, working women over the age of 70 actually have a slightly higher probability of working at jobs with high physical demands than men in this age group.

The percentage of older women working in difficult work conditions fell by more than a third, dropping from 13.8 percent in 2009 to 9.1 percent in 2014. Here also, the drop was sharpest among the oldest women, with a decline in the share of women over age 70 working in difficult work conditions dropping by 8.2 percentage points.

TABLE 4a

		Number of Workers (thousands)			Difficult Work Conditions (DWC)	PD or DWC
		(urousarius)	Any	High	(%)	(70)
Men			·			
	All (58+)	12,338	37.0	3.9	33.7	51.3
	58-61	5,253	38.1	4.5	36.6	53.2
	62-65	3,371	37.6	4.1	31.5	50.0
	66-69	1,783	33.8	3.2	30.3	48.1
	70+	1,931	35.8	2.6	32.6	51.2
Women						
	All (58+)	10,848	31.7	3.3	9.1	35.3
	58-61	4,837	31.1	3.3	8.8	34.5
	62-65	2,977	30.6	3.2	9.1	34.5
	66-69	1,548	32.7	3.2	9.4	36.1
	70+	1,486	34.9	3.3	9.4	38.6

TABLE 4b

		Number of Workers (thousands)	(thousands) Physical Demand (PD) (%) Any High		Difficult Work Conditions (DWC)	PD or DWC (%)	
		(drododrido)			(%)		
Men			•				
	All (58+)	10,012	37.0	6.0	38.2	53.3	
	58–61	4,521	38.3	6.0	38.9	54.0	
	62–65	2,662	36.9	5.8	36.5	52.5	
	66–69	1,341	35.8	6.5	38.3	52.3	
	70+	1,488	34.7	5.8	39.1	53.4	
Women							
	All (58+)	8,787	32.2	4.1	13.8	36.1	
	58–61	4,096	30.2	3.8	12.8	34.0	
	62–65	2,349	32.1	3.9	13.3	36.0	
	66–69	1,129	34.4	4.9	13.9	38.1	
	70+	1,213	37.2	4.8	17.6	41.8	

Tables 5a and **5b** show the most commonly held occupations with physically demanding work, broken down by gender in 2014 and 2009, respectively. The total share of older men in physically demanding occupations remained unchanged at 37.0 percent. A slightly smaller share of older men were employed as janitors in 2014 than in 2009, which put first-line retail supervisors into the first position. Also, there was a modest increase in the percentage of older men employed as groundskeepers, causing the occupation to move up a couple notches in the rankings.

The total share of older women in physically demanding occupations decreased from 32.3 percent in 2009 to 31.7 percent in 2014. Most notably, there was a large drop in the share that were employed as elementary or middle school teachers, from 3.4 percent to 2.2 percent. As a result, retail salespersons became the most common physically demanding occupation among older women.

TABLE 5a

Top Fifte	een Physically Demanding Occupations Held by Workers	, Age 58+	, 2014, l	oy Gender	
Rank	Physically Demanding (PD) Occupations	Any	D High	DWC	Share of workers (%)
Men		1111)	11.811		
1	First-line supervisors/managers of retail sales workers	$\sqrt{}$			2.7
2	Janitors and building cleaners	$\sqrt{}$			2.7
3	Retail salespersons	$\sqrt{}$			2.0
4	Driver/sales workers and truck drivers	$\sqrt{}$		$\sqrt{}$	1.5
5	Grounds maintenance workers	$\sqrt{}$		$\sqrt{}$	1.3
6	Carpenters	$\sqrt{}$		$\sqrt{}$	1.3
7	Laborers and freight, stock, and material movers, hand	$\sqrt{}$			1.3
8	Construction laborers	√		V	1.1
9	Farmers, ranchers, and other agricultural managers	$\sqrt{}$		V	1.0
10	Automotive service technicians and mechanics	V		V	0.7
11	Maintenance and repair workers, general	V		V	0.6
12	Electricians	V		V	0.6
13	Industrial and refractory machinery mechanics	V	$\sqrt{}$	V	0.6
	Production workers, including semiconductor processors	V		V	0.6
14	and cooling and freezing equipment operators				0.0
15	Cashiers	$\sqrt{}$			0.5
	Occupations, Total				18.5
	Share of Workers Aged 58+ in Physically Demanding Occ	cupations			37.0
Women	yy				
1	Retail salespersons	$\sqrt{}$			2.4
2	Elementary and middle school teachers				2.2
3	Cashiers	$\sqrt{}$			2.2
4	Maids and housekeeping cleaners		V		2.0
5	Personal and home care aides	$\sqrt{}$			2.0
6	First-line supervisors/managers of retail sales workers				1.9
7	Janitors and building cleaners	$\sqrt{}$	$\sqrt{}$		1.6
8	Hairdressers, hairstylists, and cosmetologists	V		V	1.1
9	Cooks	$\sqrt{}$		$\sqrt{}$	1.0
10	Nursing, psychiatric, and home health aids	V			0.8
11	Waiters and waitresses	V			0.6
12	Food service managers	V			0.5
13	Food preparation workers	V			0.5
14	Secondary school teachers	V			0.4
15	Stock clerks and order fillers	į			0.4
	Occupations, Total	•			12.1
	Share of Workers Aged 58+ in Physically Demanding Occ	cupations			31.7
	d notes: Authors' analysis of O*NET 20.1 and CEPR extract of		PS ORG	data. PD t	

Source and notes: Authors' analysis of O*NET 20.1 and CEPR extract of 2014 CPS ORG data. PD refers to Physically Demanding; DWC refers to Difficult Working Conditions.

TABLE 5b

1en	Janitors and building cleaners First-line supervisors/managers of retail sales workers Retail salespersons Driver/sales workers and truck drivers Carpenters Laborers and freight, stock, and material movers, hand	Any	High √	√	(%) 2.9 2.7
	First-line supervisors/managers of retail sales workers Retail salespersons Driver/sales workers and truck drivers Carpenters	V	V	V	2.7
	First-line supervisors/managers of retail sales workers Retail salespersons Driver/sales workers and truck drivers Carpenters	V	V	V	2.7
	Retail salespersons Driver/sales workers and truck drivers Carpenters	V			
	Driver/sales workers and truck drivers Carpenters	V			2.1
	Carpenters	\ 2		2	
				٧	1.5
	Laborers and freight, stock, and material movers, hand	- 1		.1	1.2
		V	,	V	1.1
	Grounds maintenance workers	V	$\sqrt{}$	V	1.1
	Construction laborers	V		√	1.0
	Elementary and middle school teachers	√	,		0.9
0	Taxi drivers and chauffeurs	ν,	√		0.8
1	Electricians	√,			0.8
2	Security guards and gaming surveillance officers	√			0.7
3	Maintenance and repair workers, general	$\sqrt{}$			0.7
4	Automotive service technicians and mechanics		$\sqrt{}$		0.6
5	Bus drivers	$\sqrt{}$	$\sqrt{}$		0.6
Rest of	Occupations, Total				18.2
Total S	Share of Workers Aged 58+ in Physically Demanding Occu	pations			37.0
Vomen .		-			
	Elementary and middle school teachers	$\sqrt{}$			3.4
	Retail salespersons	V			2.7
	First-line supervisors/managers of retail sales workers	$\sqrt{}$			2.2
	Cashiers	√		V	2.2
	Maids and housekeeping cleaners	V	$\sqrt{}$		2.0
	Customer service representatives	V	•		1.3
	Janitors and building cleaners	į	$\sqrt{}$	V	1.2
	Cooks	Ż	•	Ż	1.2
	Hairdressers, hairstylists, and cosmetologists	V		V	1.0
0	Nursing, psychiatric, and home health aids	1		V	0.9
1	Stock clerks and order fillers	V	V		0.7
		- ;		2	
2	Medical assistants and other healthcare support occupations	√ √		√	0.6
3	Secondary school teachers	1			0.6
4	Food service managers	√ ./			0.5
5	Waiters and waitresses	$\sqrt{}$			0.5
	Occupations, Total Share of Workers Aged 58+ in Physically Demanding Occu				11.4 32.3

Source and notes: Authors' analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data. PD refers to Physically Demanding; DWC refers to Difficult Working Conditions.

Race/Ethnicity

Tables 6a and **6b** show the breakdown of older workers in physically demanding occupations by racial and ethnic group for 2014 and 2009, respectively. There was little change among Whites, with the share of older workers in physically demanding jobs essentially staying the same at about 31.8 percent. There was a small drop in the percent of older White workers in difficult work conditions, from 24.9 percent in 2009 to 21.4 percent in 2014.

There was a much sharper drop in both categories among Black workers, with the percentage of older workers in physical demanding jobs falling from 43.3 percent in 2009 to 38.9 percent in 2014. There was also a large drop in the percentage of older Black workers working in difficult work conditions, from 32.6 percent to 23.9 percent. In both cases the declines were sharpest among older workers. It is worth noting that despite these large drops, a larger share of older Black workers are still employed in physically demanding jobs or face difficult work conditions than their White counterparts.

There was a similar pattern among Latino workers. The percentage of older Latino workers who work in physically demanding jobs fell from 54.3 percent in 2009 to 51.0 percent in 2014. There was a much sharper drop in the percentage working in difficult work conditions, from 41.8 percent to 29.1 percent. These declines were also sharpest among the oldest workers.

The changes for older Asian workers were considerably smaller. The share of older Asian workers employed at physically demanding jobs fell slightly, from 44.0 percent in 2009 to 42.8 percent in 2014. There was a sharper drop in the share working in jobs that have difficult work conditions, with a decline from 24.2 percent in 2009 to 18.9 percent in 2014.

TABLE 6a

Workers in P	nysically Dema					s in 2014, Ages 58+, b	y Race/Ethnicit
	Number of	Phy	sical Dem	and (PD) (%	(o)	Difficult Work	
	Workers		Any		High	Conditions (DWC)	PD or DWC (%
	(thousands)	All	Male	Female	Tilgii	$(^{0}\!/_{\!0})$	
White							
All (58+)	17,944	31.8	34.1	29.0	2.8	21.4	41.0
<i>58</i> - <i>61</i>	7,617	31.8	35.1	28.1	3.0	22.3	41.3
62-65	4,918	31.4	34.4	27.9	2.9	19.7	39.6
66-69	2,621	30.1	31.0	29.0	2.6	20.1	39.7
70+	2,788	33.8	33.7	34.0	2.4	22.7	44.2
Black							
All (58+)	1,956	38.9	43.6	35.0	4.3	23.9	49.0
58-61	919	39.5	45.9	34.2	5.7	25.0	49.5
62-65	527	37.7	41.8	34.1	3.6	22.6	48.2
66-69	255	39.4	39.3	39.4	1.7	22.1	48.1
70+	255	38.9	43.1	35.2	3.8	24.0	49.9
Latino							
All (58+)	1,900	51.0	53.8	47.5	9.1	29.1	60.7
58-61	927	51.2	53.8	47.9	9.7	31.0	61.5
62-65	513	50.9	55.4	45.3	9.6	30.5	60.1
66-69	255	53.6	52.5	54.9	8.8	25.7	61.9
70+	205	47.2	51.4	42.3	5.7	21.5	57.3
Asian							
All (58+)	1,176	42.8	43.9	41.5	4.6	18.9	48.9
<i>58–61</i>	543	39.9	40.5	39.4	3.0	19.5	46.9
62-65	324	47.9	50.8	44.5	5.8	21.2	54.4
66-69	171	41.8	40.6	43.1	5.7	16.2	46.6
70+	138	43.2	43.9	42.3	7.0	14.3	46.8
Other							
All (58+)	210	35.7	41.8	30.1	6.5	29.4	50.2
58-61	84	37.0	43.3	31.9	6.3	29.2	48.9
62-65	65	28.9	35.8	24.9	5.1	25.5	40.6
66-69	30	41.5	39.5	45.4	11.8	28.3	58.7
70+	31	41.2	48.3	28.1	4.8	39.4	65.7

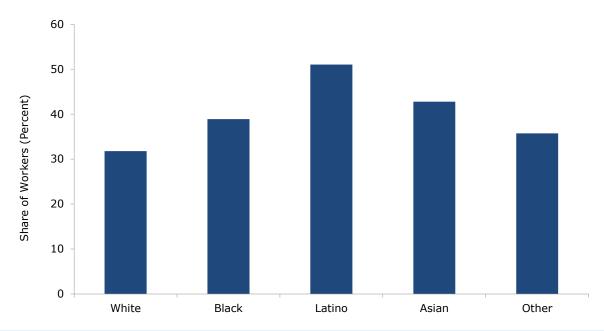
Source and notes: Authors' analysis of O*NET 20.1 and CEPR extract of 2014 CPS ORG data. "Asian" here refers to Asian Pacific Americans.

TABLE 6b

Workers in P	hysically Dema					in 2009, Ages 58+, by	Race/Ethnicity
	Number of	Physi	cal Dem	and (PD) (%	(o)	Difficult Work Conditions (DWC)	PD or DWC (%)
	Workers		Any		High		
	(thousands)	All	Male	Female	riigii	(%)	
White							
All (58+)	14,940	31.7	33.0	30.1	3.9	24.9	42.6
58-61	6,719	31.2	34.0	28.0	3.7	24.3	41.6
62-65	4,021	31.4	32.7	30.0	3.6	23.8	42.0
66-69	1,992	32.1	32.4	31.8	4.6	25.7	43.5
70+	2,208	33.3	31.3	35.9	4.5	28.1	46.2
Black							
All (58+)	1,542	43.3	49.3	38.2	9.8	32.6	53.2
58-61	780	42.0	49.4	35.5	8.7	33.4	51.7
62-65	377	43.2	48.8	38.4	8.7	26.9	52.3
66-69	177	45.0	48.9	42.1	15.1	34.9	53.7
70+	208	46.8	50.4	44.0	11.6	38.1	59.7
Latino							
All (58+)	1,384	54.3	62.4	43.6	12.3	41.8	62.4
58-61	667	53.3	64.6	39.0	12.0	41.5	61.8
62-65	372	55.0	62.6	44.8	15.0	43.8	63.1
66-69	163	60.0	60.8	58.8	11.9	41.1	65.1
70+	182	51.2	55.2	46.1	8.4	39.4	60.7
Asian							
All (58+)	765	44.0	47.1	40.6	5.7	24.2	50.5
58-61	368	44.8	45.6	43.9	5.9	25.2	52.0
62-65	201	46.4	52.2	39.4	6.5	25.2	51.8
66-69	111	38.3	41.2	33.7	3.4	19.5	45.7
70+	86	42.5	50.0	36.2	6.1	23.5	47.4
Other							
All (58+)	168	31.1	32.6	29.8	5.7	26.5	42.7
58-61	83	31.1	33.2	29.3	7.8	24.6	41.4
62-65	41	31.3	28.3	33.1	2.0	32.2	45.9
66-69	27	31.0	25.5	38.2	5.2	24.1	46.7
70+	17	30.5	51.7	12.2	5.6	25.9	34.6

Source and notes: Authors' analysis of O*NET 14.0 and CEPR extract of 2009 CPS ORG data. "Asian" here refers to Asian Pacific Americans.

FIGURE 2
Share of Workers in Physically Demanding Jobs in 2014, Ages 58+, by Race/Ethnicity



Source and notes: Authors' analysis of O*NET 20.1 and CEPR extract of 2014 CPS ORG data.

Education

There were notable differences in the patterns of change over this period by educational attainment, with a decline in the share of more educated older workers in physically demanding jobs, while the share of less educated workers actually increased slightly. This is shown in **Tables 7a** and **7b**.

The share of older workers without a high school degree in physically demanding jobs rose from 62.8 percent in 2009 to 68.4 percent in 2014. There was a substantial decline in the share working in difficult work conditions, from 55.5 percent to 43.5 percent. However, even with this decline, the percentage of older workers without a high school degree who either worked in a physically demanding job or difficult work conditions increased from 77.2 percent to 81.4 percent.

There was also a small increase in the share of older workers with a high school degree in physically demanding jobs, rising from 45.5 percent in 2009 to 47.5 percent in 2014. While there was a decline in the overall share of older workers facing difficult work conditions, the share of older workers with

high school degrees who either had physically demanding jobs or faced difficult work conditions rose slightly from 58.9 percent to 61.0 percent.

There was little change in the share of workers with only some college experience who have physically demanding jobs or face difficult work conditions. Yet, there was a substantial drop in both categories for workers with college degrees. The share who have physically demanding jobs fell from 25.6 percent in 2009 to 22.7 percent in 2014. The share who either have physically demanding jobs or work in difficult work conditions fell from 33.6 percent to 29.4 percent.

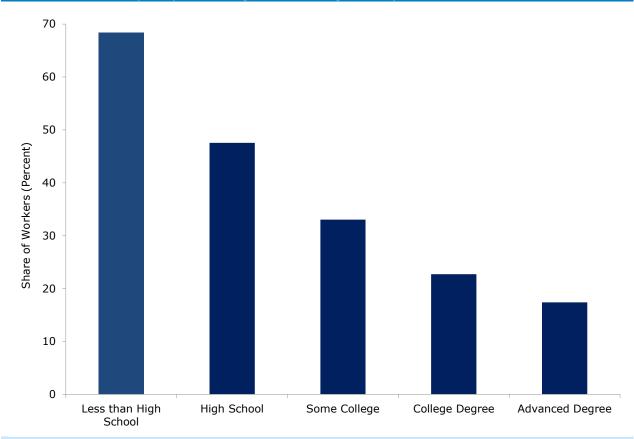
TABLE 7a

workers in P						ns in 2014, Ages 58+,	by Education
	Number of Workers	Pn		and (PD) (%	0)	Difficult Work	PD or DWC (%
			Any		High	Conditions (DWC)	
	(thousands)	All	Male	Female	0	(%)	
Less than High		40.4			4.0		
All (58+)	1,424	68.4	66.4	71.4	12.8	43.5	81.4
58-61	576	69.6	66.4	75.0	15.2	45.1	83.0
62-65	338	69.6	71.5	66.3	12.8	45.9	82.6
66-69	194	71.4	64.9	81.0	12.1	42.1	82.0
70+	315	62.8	61.6	64.6	8.5	38.9	77.0
High School							
All (58+)	6,686	47.5	52.4	42.5	5.4	33.8	61.0
58-61	3,065	48.6	53.6	42.8	5.7	35.2	61.9
62-65	1,703	47.4	54.5	40.9	5.6	32.8	59.8
66-69	894	45.4	49.0	42.1	4.6	31.8	59.8
70+	1,024	46.6	48.0	45.1	4.6	32.9	61.3
Some College							
All (58+)	6,185	33.0	39.3	27.0	3.0	23.4	43.1
<i>58–61</i>	2,775	32.6	39.8	25.9	3.3	24.6	43.3
62-65	1,710	33.8	42.0	25.6	3.4	23.1	43.0
66-69	869	32.2	34.5	30.1	2.5	22.5	42.1
70+	831	33.8	37.1	30.5	1.7	21.3	43.4
College							
All (58+)	4,953	22.7	23.8	21.3	1.4	12.0	29.4
<i>58–61</i>	2,181	20.5	20.7	20.3	1.3	11.6	27.1
62-65	1,450	25.2	27.6	21.7	1.7	11.8	31.3
66-69	686	24.3	23.9	24.9	1.7	13.2	31.8
70+	635	23.2	24.8	20.7	0.9	12.7	29.8
Advanced							
All (58+)	3,939	17.4	15.5	20.0	1.0	5.4	20.4
58-61	1,493	17.8	15.7	20.2	0.8	5.0	19.9
62-65	1,146	16.8	12.0	22.9	1.0	4.6	19.7
66-69	688	17.2	18.5	15.3	1.4	4.8	20.3
70+	612	17.6	17.4	17.9	0.7	8.5	23.1
Source and no	tes: Authors' ana	alysis of O*	NET 20.1 a	ınd CEPR ex	xtract of 20	14 CPS ORG data.	

TABLE 7b

	•			and (PD) (%		ns in 2009, Ages 58+,	by Education
	Number of Workers	1 11	*	and (1 D) (7	0)	Difficult Work Conditions (DWC)	PD or DWC (%
	(thousands)	A 11	Any	TD 1	High	(%)	PD 01 DWC (70
T .1 TT' 1		All	Male	Female		(70)	
Less than High <i>All (58</i> +)	1,497	62.8	64.5	60.3	13.6	55.5	77.2
1 /		65.3	68.6	60.0	14.6	61.4	80.3
58-61	567						
62-65	385	63.1	67.7	57.0	12.3	52.5	76.5
66-69	223	60.3	57.7	64.0	13.9	50.4	72.6
70+	322	59.6	57.8	62.1	13.4	52.1	75.9
High School	F 4F2	45.5	F1 1	40.4	7.4	27.0	50.0
All (58+)	5,452	45.5	51.1	40.4	7.4	37.9	58.9
58-61	2,414	45.6	53.5	38.6	7.5	38.5	58.3
62-65	1,404	46.0	51.8	40.6	7.5	37.4	59.6
66-69	776	46.2	50.4	42.2	7.9	37.1	59.6
70+	859	43.6	43.6	43.5	6.6	38.0	58.7
Some College	1.0.10	22.4	40.6	25 /		24.0	
All (58+)	4,849	33.1	40.6	25.6	4.7	26.8	44.5
58-61	2,364	33.6	43.2	23.6	4.6	27.2	44.6
62-65	1,302	31.6	37.0	26.6	4.9	25.8	43.2
66-69	601	33.1	39.7	27.1	5.4	26.5	44.3
70+	582	34.3	38.8	29.8	4.4	27.8	47.3
College							
All (58+)	3,820	25.6	26.3	24.6	2.4	15.4	33.6
58-61	1,858	24.4	24.6	24.2	2.5	14.7	32.5
62-65	1,033	25.8	28.5	22.1	2.3	15.1	33.1
66-69	429	27.2	26.5	28.2	2.1	13.8	34.2
70+	499	28.0	27.6	28.8	2.8	19.7	38.2
Advanced							
All (58+)	3,181	17.0	13.5	22.6	1.0	7.8	22.0
58-61	1,414	17.5	13.6	22.8	0.6	6.5	22.0
62-65	887	19.4	15.4	26.0	0.9	7.2	23.4
66-69	441	13.7	11.5	17.6	1.9	11.6	21.3
70+	438	13.8	11.8	18.6	1.3	9.6	19.8

FIGURE 3
Share of Workers in Physically Demanding Jobs in 2014, Ages 58+, by Education



Source and notes: Authors' analysis of O*NET 20.1 and CEPR extract of 2014 CPS ORG data.

Immigrant Status

Tables 8a and **8b** give the percentage of older workers employed in physically demanding jobs for immigrant and non-immigrant workers. There was little change in the percentage working at physically demanding jobs for either group between 2009 and 2014, although there was a sharp falloff for immigrant workers over age 70. However given the small sample size, this could be measurement error. There was a sharp drop in the share of older immigrant workers working in difficult work conditions, from 33.8 percent in 2009 to 24.8 percent in 2014. Even with this drop, there was little change in the share of older workers who either worked in physically demanding jobs or worked in difficult work conditions.

TABLE 8a

	Number of Workers (thousands)	Ph	ysical Dem	and (PD) (%	Difficult Work		
		Any			TTULL	Conditions (DWC)	PD or DWC (%)
		All	Male	Female	High	(%)	
Immigrant							
All (58+)	3,073	46.6	47.7	45.3	6.8	24.8	55.3
58-61	1,420	48.0	49.5	46.2	6.9	27.4	57.4
62-65	823	48.5	49.8	46.7	7.8	26.0	57.2
66-69	443	44.7	43.8	46.0	6.9	20.8	52.3
70+	388	39.6	40.9	38.1	3.8	17.2	47.4
Non-immig r at	nt						
All (58+)	20,113	32.7	35.3	29.8	3.1	21.7	42.0
58-61	8,671	32.6	36.2	28.7	3.4	22.6	42.1
62-65	5,525	32.2	35.6	28.5	3.1	20.2	40.6
66-69	2,889	31.5	32.2	30.8	2.7	20.5	41.0
70+	3,029	34.9	35.2	34.5	2.8	23.2	45.5

TABLE 8b

	Number of Workers (thousands)	Ph	ysical Dem	and (PD) (%	Difficult Work		
		Any			TTU-1.	Conditions (DWC)	PD or DWC (%)
		All	Male	Female	High	(%)	
mmigrant							
All (58+)	2,282	47.5	52.2	41.8	9.8	33.8	55.7
<i>58–61</i>	1,086	47.8	53.0	28.6	10.1	35.0	56.8
62-65	607	48.9	53.7	30.7	10.6	34.1	56.6
66-69	302	44.5	50.0	34.1	9.4	30.5	51.2
70+	287	46.2	48.2	36.4	8.0	32.2	54.0
Non-immigrai	nt						
All (58+)	16,517	33.0	34.9	31.0	4.5	25.8	43.8
<i>58–61</i>	7,531	32.5	36.1	41.9	4.2	25.3	42.7
62-65	4,405	32.7	34.5	42.9	4.2	24.4	43.1
66-69	2,168	33.9	33.7	36.9	5.2	26.6	45.1
70+	2,414	34.5	33.0	43.8	5.1	29.2	47.5

Wage Quintile

Tables 9a and **9b** display the share of older workers in each wage quintile who were employed in physically demanding jobs or facing difficult work conditions in 2014 and 2009, respectively. The bottom quintile had a modest decline in the share working at physically demanding jobs from 56.4 percent in 2009 to 54.8 percent in 2014. There was a sharper decline in the share working at jobs with high physical demands, from 9.4 percent to 6.4 percent. Here also, the decline was sharpest among the oldest workers. The share of older workers who either had a physically demanding job or faced difficult work conditions was virtually unchanged at about 63.5 percent in 2014.

The declines in physically demanding jobs were also notable among higher paid workers. For example, the percentage of workers in the fourth wage quintile working at physically demanding jobs fell from 29.0 percent in 2009 to 26.5 percent in 2014. The percentage of workers who worked either in physically demanding jobs or faced difficult work conditions fell from 39.5 percent in 2009 to 36.1 percent in 2014.

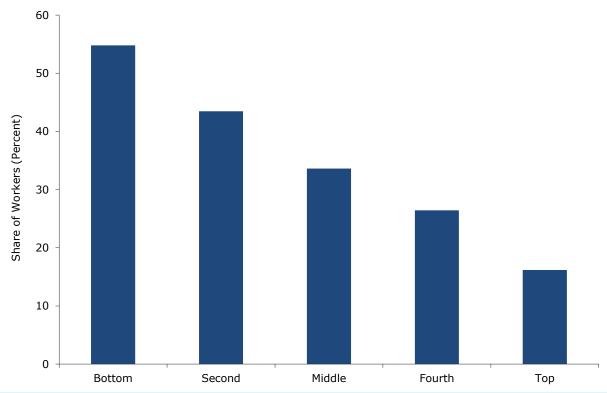
TABLE 9a

	Number of	Ph	ysical Dem	and (PD) (%	<u> </u>	Difficult Work	
	Workers (thousands)		Any		High	Conditions (DWC)	PD or DWC (%)
		All	Male	Female		(%)	
Bottom							
All (58+)	3,748	54.8	54.2	55.1	6.4	21.6	63.5
58-61	1,707	55.9	57.0	55.2	7.1	22.1	64.7
62-65	1,045	54.2	55.8	53.2	5.8	18.4	61.2
66-69	511	56.0	50.3	60.3	7.6	25.6	65.9
70+	482	50.5	48.5	52.0	4.1	21.8	60.1
Second							
All (58+)	3,749	43.5	54.2	35.4	4.6	25.4	52.8
58-61	1,711	40.3	52.5	31.6	4.7	26.4	50.3
62-65	1,045	44.1	57.2	34.9	5.3	26.1	52.9
66-69	511	48.4	54.7	43.8	4.5	23.6	57.9
70+	483	46.8	52.2	41.9	2.6	22.4	55.9
Middle							
All (58+)	3,748	33.7	44.5	22.6	3.3	25.6	44.2
58-61	1,709	33.0	44.1	20.8	3.2	27.4	44.4
62-65	1,044	34.7	46.8	21.9	4.2	25.4	44.4
66-69	511	33.7	43.4	24.5	2.4	22.4	43.3
70+	483	36.7	43.4	29.2	3.1	26.3	48.7
Fourth							
All (58+)	3,749	26.5	33.7	17.4	1.9	22.1	36.1
58-61	1,709	26.7	34.5	16.5	2.5	24.8	37.6
62-65	1,046	26.1	34.3	16.2	1.4	20.7	35.3
66-69	511	21.8	29.6	13.4	1.1	16.5	29.1
70+	484	28.3	33.1	22.9	1.8	19.6	36.4
Гор						40.0	
All (58+)	3,749	16.2	16.3	16.0	1.7	10.9	22.1
58-61	1,710	16.4	16.1	16.9	2.0	12.9	23.3
62-65	1,046	15.4	15.9	14.6	1.4	10.5	21.3
66-69	511	14.4	14.0	15.1	1.1	8.0	19.9
70+	483	20.1	19.6	21.1	1.9	6.8	22.4

TABLE 9b

TOTACIO III I				and (PD) (%		s in 2009, Ages 58+, b	, wase Quintile
	Number of Workers (thousands)	PII	J	and (PD) (7	0)	Difficult Work	DD DW(C (0/)
		Any			High	Conditions (DWC)	PD or DWC (%)
	(uiousaiius)	All	Male	Female	O	(%)	
Bottom	2.004	F. ()	50.7	F 4 7	0.4	22.4	(2.2
All (58+)	2,984	56.4	58.7	54.7	9.4	33.4	63.3
58-61	1,434	55.3	63.1	50.4	8.6	31.4	61.0
62-65	801	57.0	61.8	53.8	8.5	30.7	62.8
66-69	367	58.2	59.0	57.7	10.8	32.8	65.3
70+	380	54.8	47.3	59.6	8.7	36.9	63.4
Second	2004	44.0	5 (0	20.4		20.0	50.4
All (58+)	2,984	46.0	56.9	38.1	7.2	29.8	53.4
58-61	1,435	40.7	54.3	31.2	5.6	29.5	49.9
62-65	803	44.7	56.5	36.6	7.8	27.6	52.2
66-69	366	52.7	56.3	49.6	10.7	35.3	60.1
70+	381	53.1	58.4	48.6	8.5	33.7	61.6
Middle							
All (58+)	2,984	35.8	46.9	26.7	4.9	27.0	45.6
<i>58–61</i>	1,434	34.5	46.5	23.6	4.7	28.1	45.1
62-65	802	38.0	45.3	32.1	4.5	25.9	47.5
66-69	367	39.4	47.8	31.5	6.6	28.4	47.4
70+	381	43.5	51.4	37.3	7.1	34.2	55.0
Fourth							
All (58+)	2,984	29.0	36.3	20.3	4.0	24.6	39.5
<i>58–61</i>	1,435	29.1	36.7	19.4	4.2	24.7	39.4
62-65	802	29.1	37.2	18.7	4.2	25.7	39.8
66-69	367	29.9	38.1	14.0	3.5	22.1	38.4
70+	381	30.0	36.4	22.6	6.0	26.9	40.0
Гор							
All (58+)	2,984	16.9	17.8	15.1	1.8	13.5	24.7
58-61	1,435	16.9	16.7	17.2	2.0	14.4	25.4
62-65	803	16.5	17.7	11.0	1.2	11.9	23.9
66-69	367	15.3	17.6	21.2	1.6	11.9	22.8
	381	17.6	16.0	23.4	1.6	9.0	22.0

FIGURE 4
Share of Workers in Physically Demanding Jobs in 2014, Ages 58+, by Wage Quintile



Source and notes: Authors' analysis of O*NET 20.1 and CEPR extract of 2014 CPS ORG data.

Conclusion

As was the case in 2009, a substantial percentage of older workers in 2014 worked in physically demanding jobs or in jobs with difficult work conditions. There was a significant decline in the share of older workers who worked in jobs that have high physical demands. Insofar as there were declines, they disproportionately went to better educated and higher paid workers.

From the standpoint of plans to increase the Social Security retirement age, these data indicate that many workers would face serious hardship by working later into their life. This is especially the case for racial and ethnic minorities, less educated workers and lower earners.

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