



Health Implications of the Aging Domestic Crop Worker Population

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Disclaimer: The views are solely those of the presenters.

Outline

Aging of the Farm Labor Force:

- Why does average age of farmworkers keep going up?
- Health status and issues for older farmworkers (Age 45+)
- Demographic and household characteristics of older farmworkers
- Discussion about health centers and older farmworkers





**What is the
NAWS?**

The National Agricultural Workers Survey

- National survey of crop workers, started in Federal Fiscal Year 1989
- Annual random sample survey of 1,500–3,000 workers
- Establishment survey – find workers at work
- Reliable source of information on crop worker demographics, employment and health
- Limited regional coverage and no local numbers



NAWS Sampling Universe

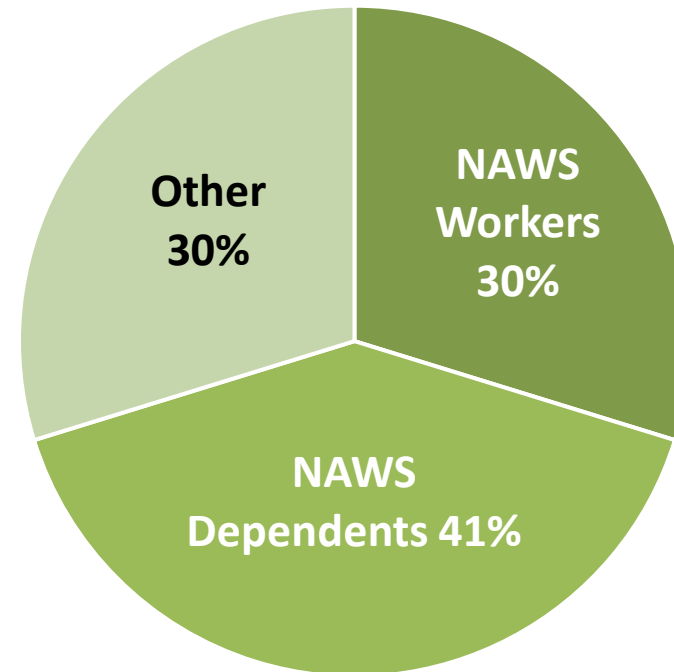
Includes:

- Currently employed – in last 12 months
- Domestic – currently in the US
- Crop workers – NAICS 111, 1151
- Family members of the above groups

Does not include:

- Formerly employed ag workers
- H-2A workers
- Livestock workers NAICS 112, 1152
- Aged or disabled workers who are no longer in the crop labor force
- Family members of the above groups

Percent of 330g Migratory and Seasonal
Agricultural Worker Population
(Calculations based on NAWS 2018–2020)



Calculations based on NAWS, U.S. Department of State H-2A Visas, and Top-Down Farm Worker Estimates



Literature Review

Literature Review

The literature on older farmworkers as a cohort is sparse, though there are several public health studies that look at age as a factor in health issues; however, none are cohort studies on the older farmworker population. For example:

- “Evidence... suggests that cumulative exposure to low levels of pesticides over many years of agricultural work is associated with neurological impairment as measured by the Selective Attention, Symbol-Digit, Reaction Time tests.” (*Rohlman et al., 2007*)
- “Farmworkers experience levels of lifetime and residential pesticide exposure that are consistently greater than among non-farmworkers.” (*Arcury et al., 2014*)
- The cohort of farmworkers aged 50 and older showed, “a crude, non-fatal injury rate of 9.3 injured farmers per 100 per year.” “Chronic bronchitis/emphysema (estimated odds ratio [EOR]=1.57), back problems (EOR=1.37), arthritis (EOR=1.31), 3 to 4 restless nights in the past week (EOR = 2.02), or 5 to 7 restless nights in the past week (EOR = 1.82) were at significantly higher odds of sustaining a farmwork-related injury”. (*Marcum, J. L. et al., 2011*)



The Aging of the Farmworker Population

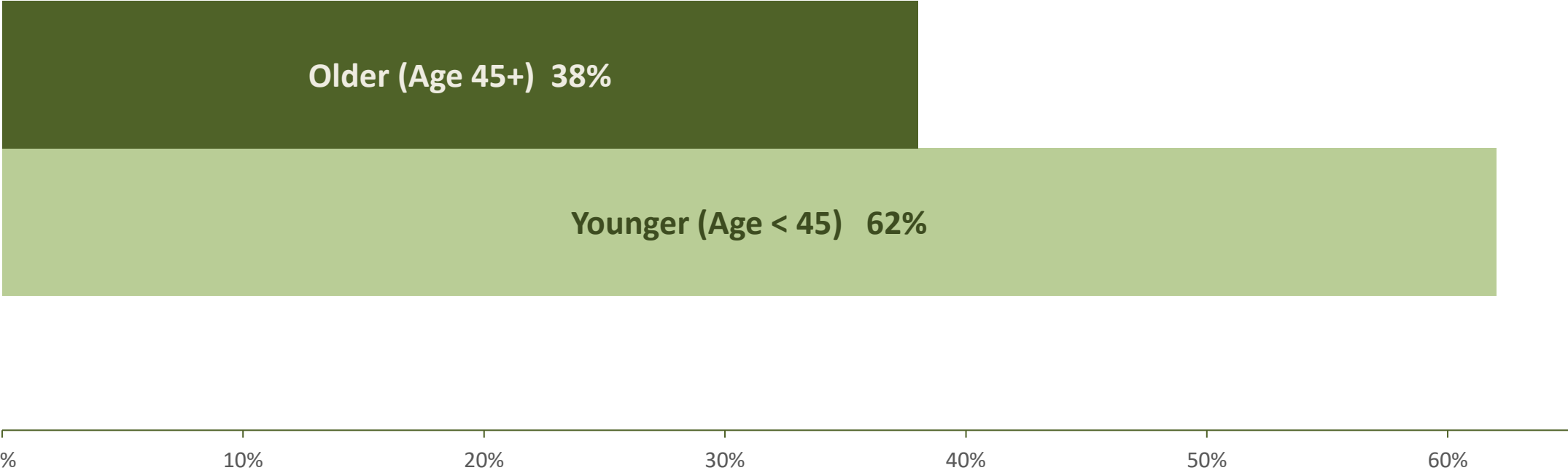
Why is the NAWS Farmworker Population Aging

- The US workforce is aging but not as fast as farmworkers are
- Fewer younger workers entering farm work except through the H-2A program, so the domestic farm labor force is getting older
- Workers are staying in farm work longer



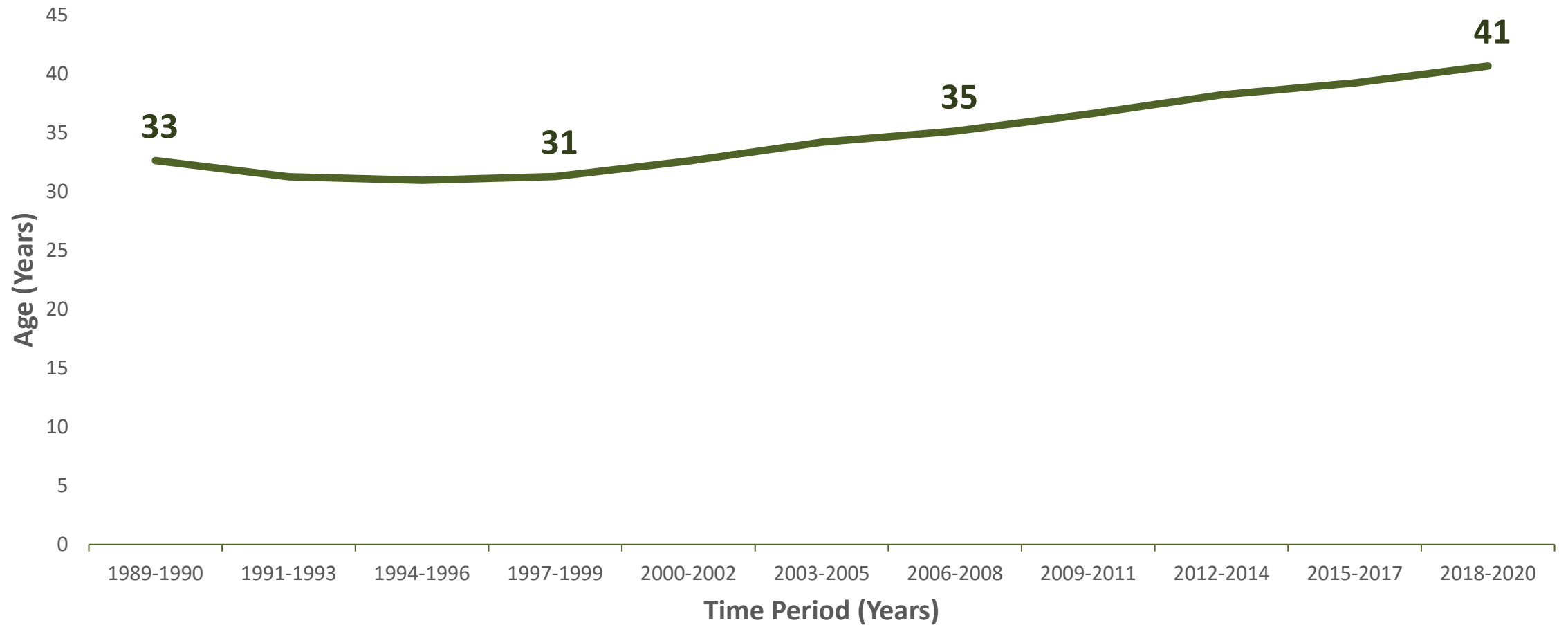
Proportion of Older Vs. Younger Farmworkers

(Source: NAWS 2018-2020)



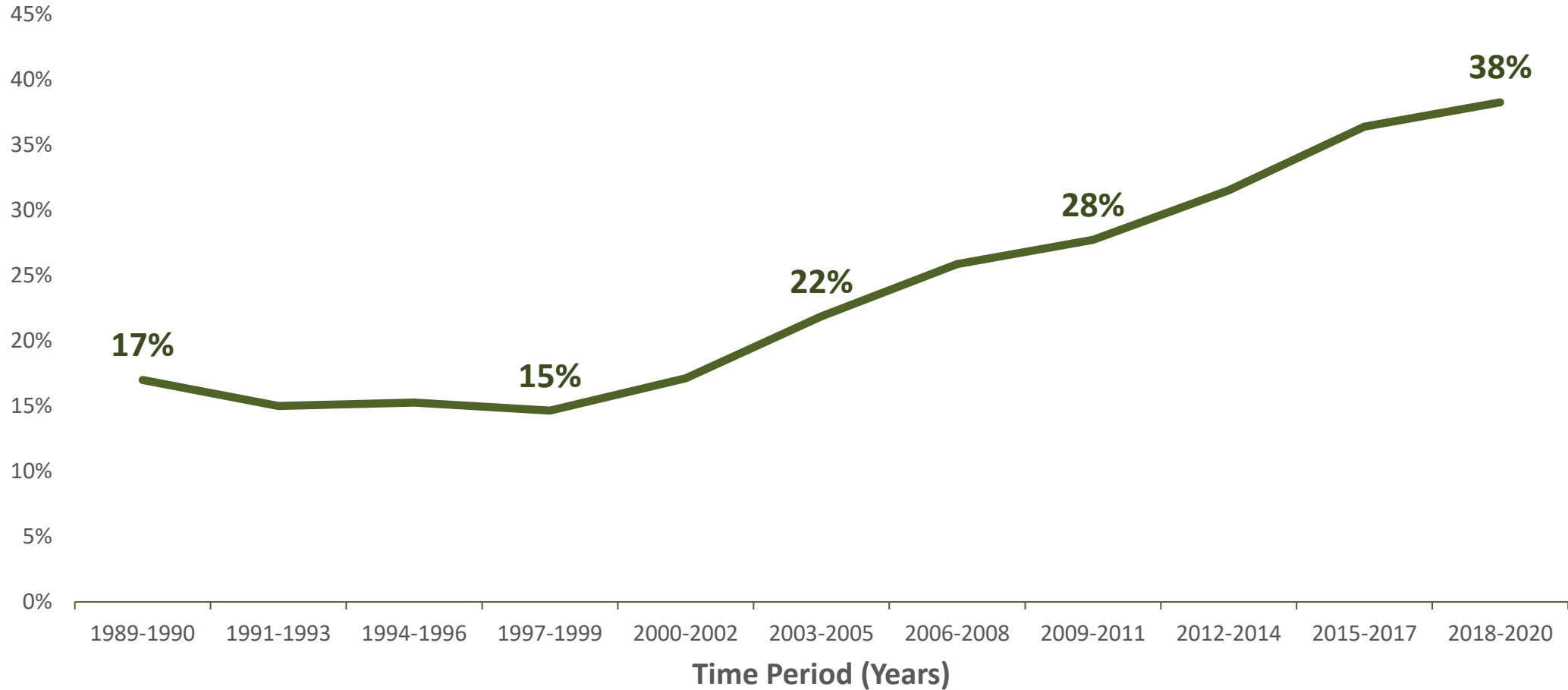
Trends of Average Age of Farmworkers

(Source: NAWS 1989-2020)



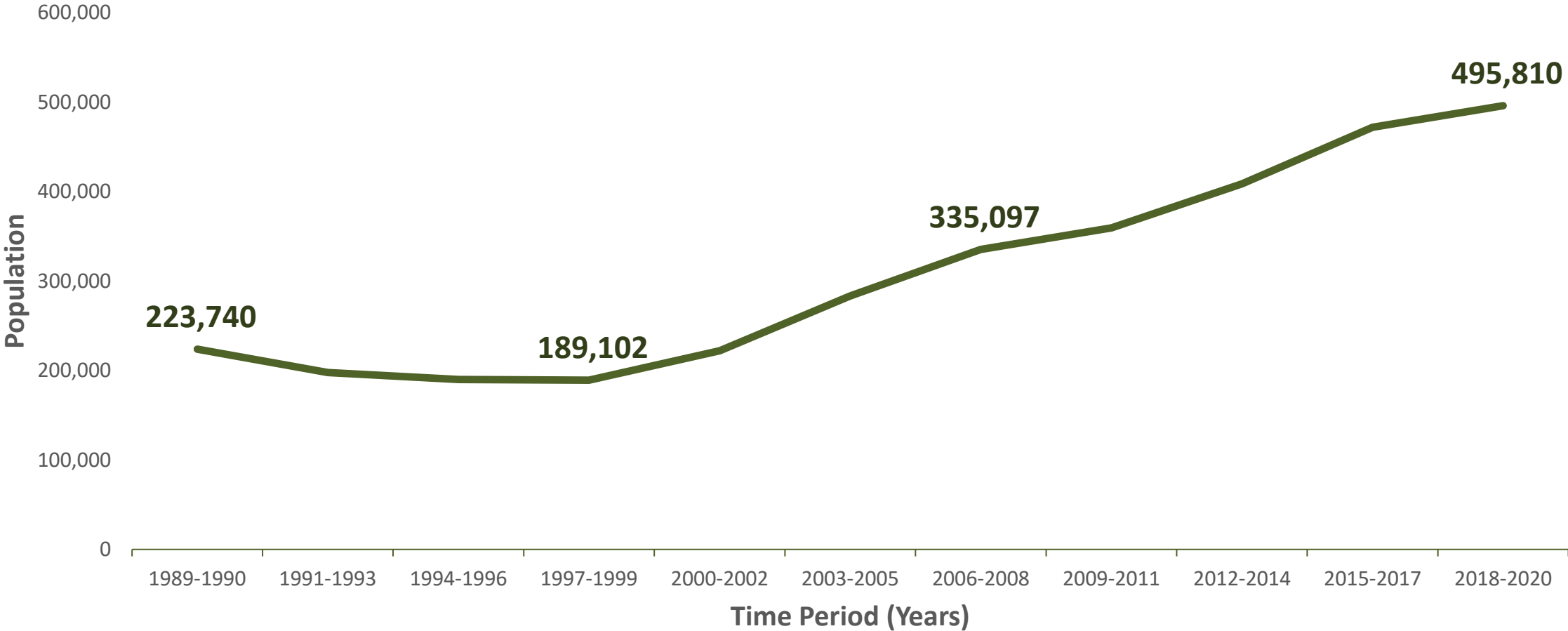
Trends of the Proportions of Older Farmworkers

(Source: NAWS 1989-2020)



Estimated Size of Older Workforce¹

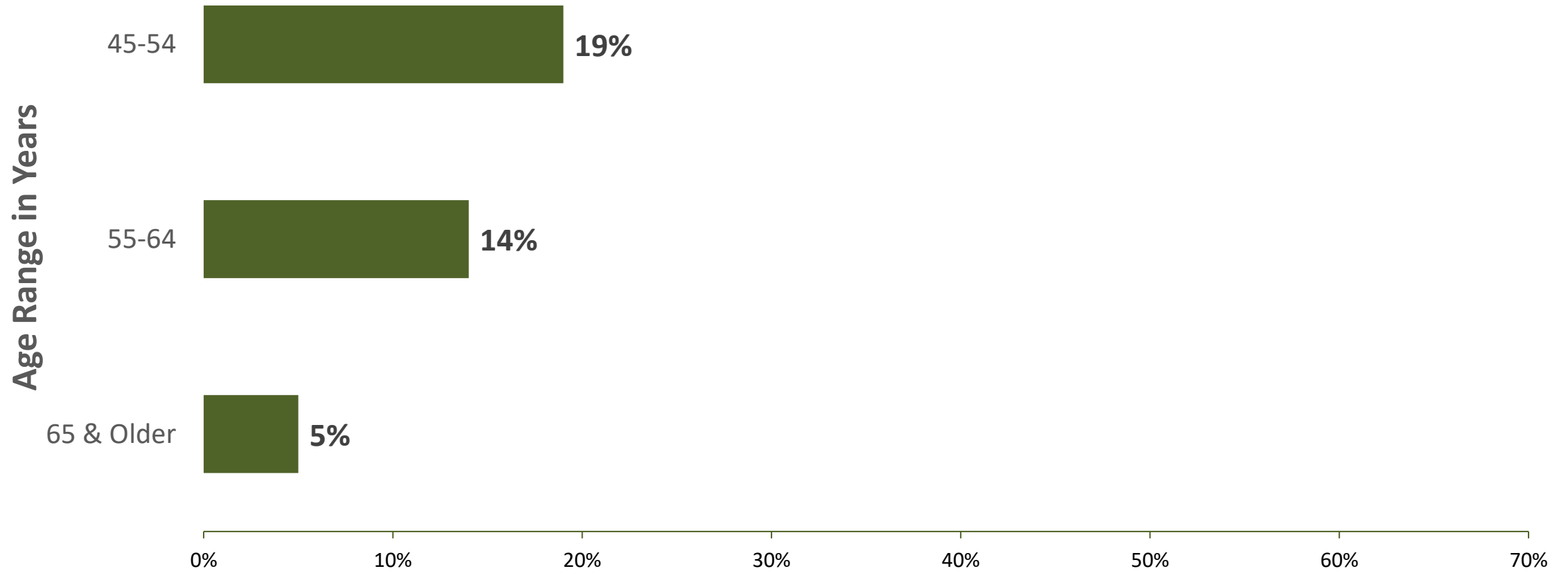
(Source: NAWS 1989-2020)



¹ Estimates calculated omitting H-2A workers whose age is unknown.

Age Distribution of Older Respondents, 10-Year Ranges

(Source: NAWS 2018-2020)



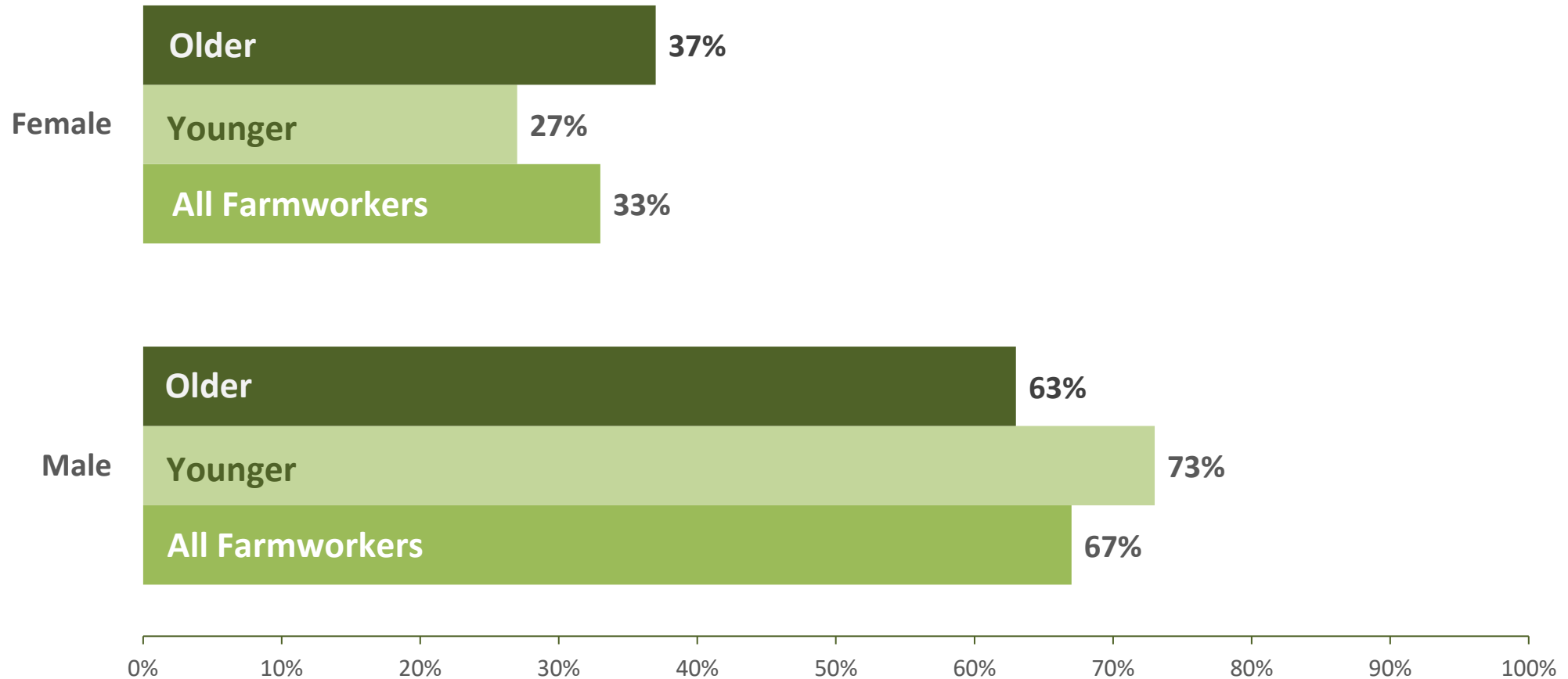


Demographics of the Aging Farmworker Population

Gender Distribution

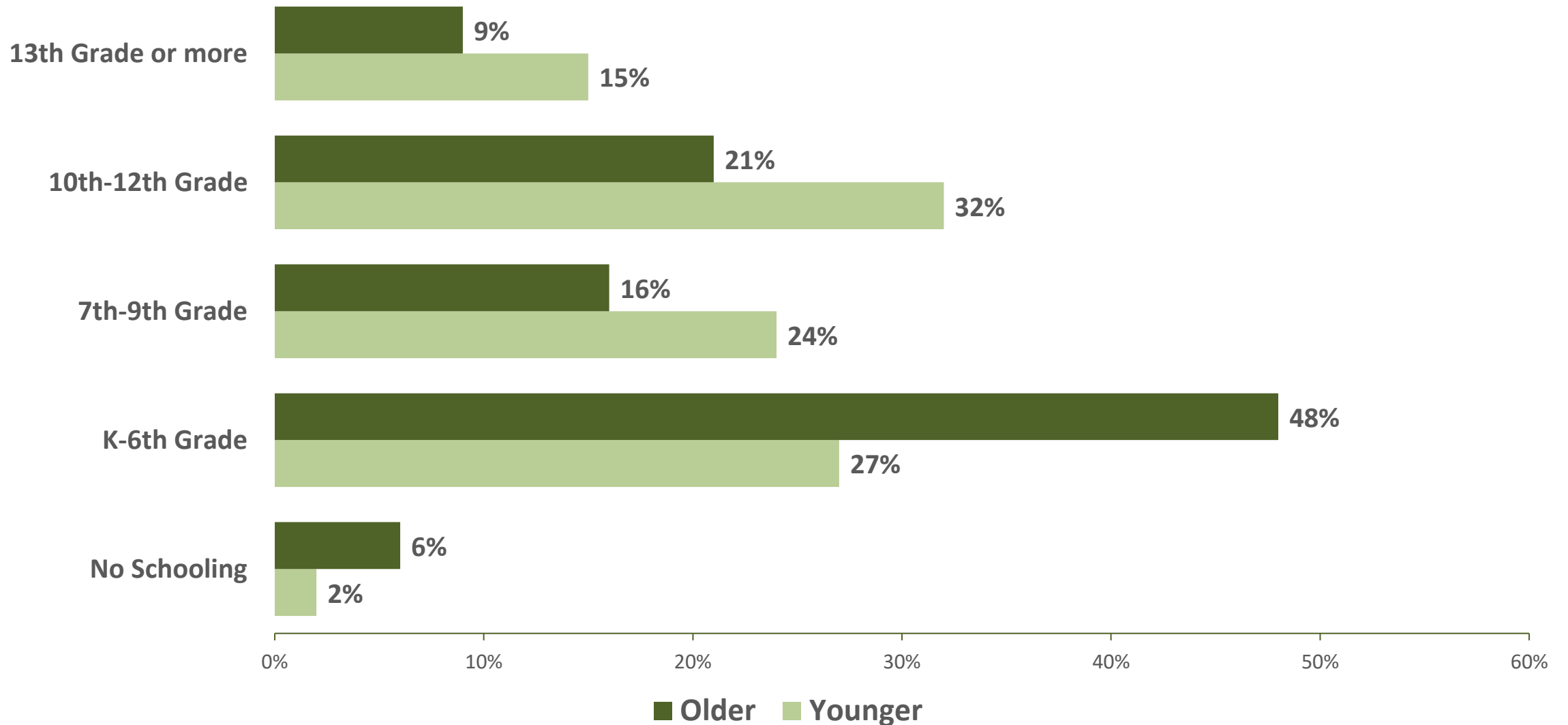
Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Distribution of Highest Grade Completed Older vs. Younger Farmworkers

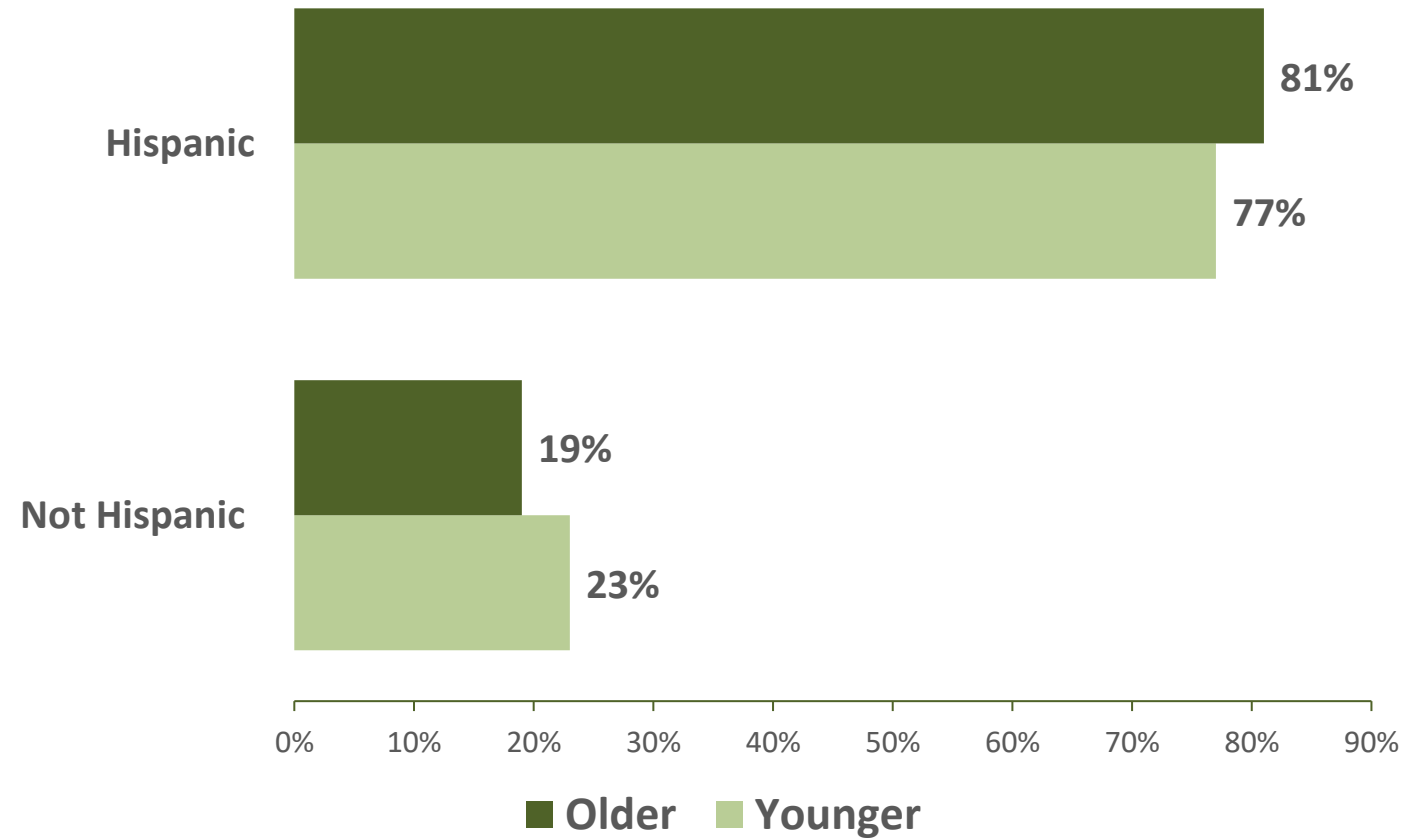
(Source: NAWS 2018-2020)





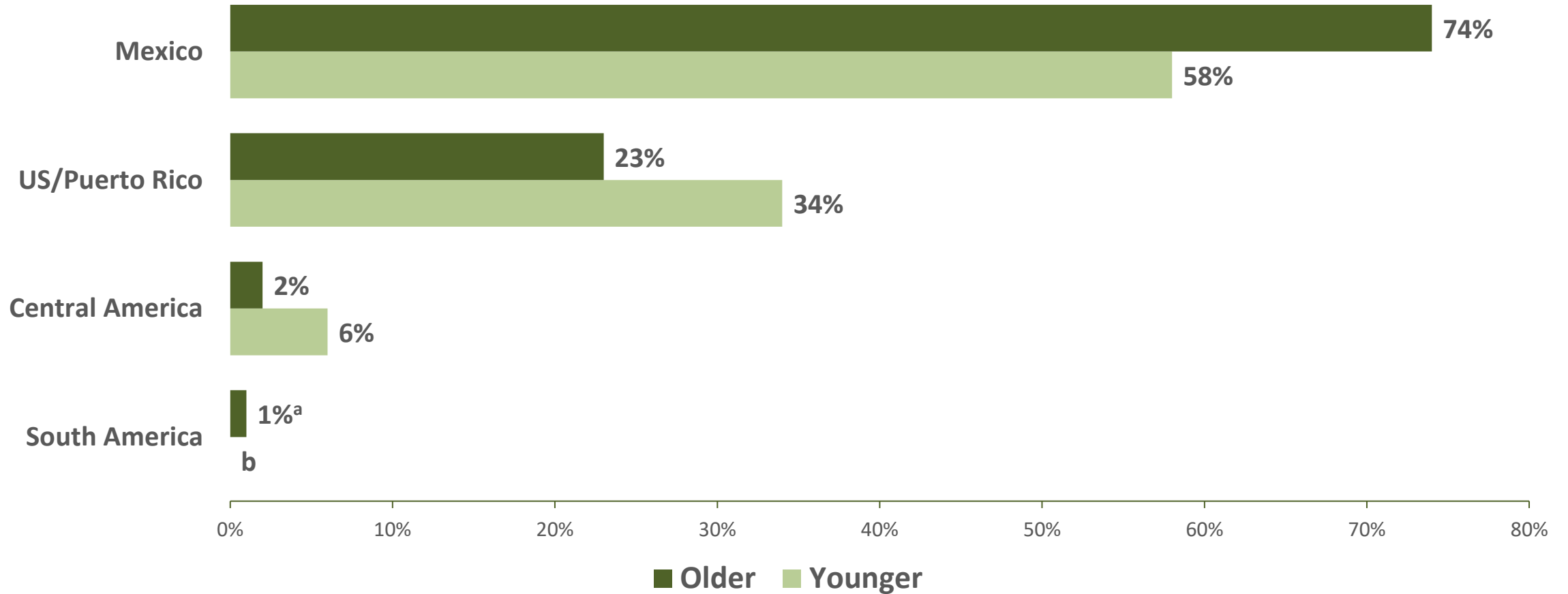
Ethnicity Distribution Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Birthplace of Respondents Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



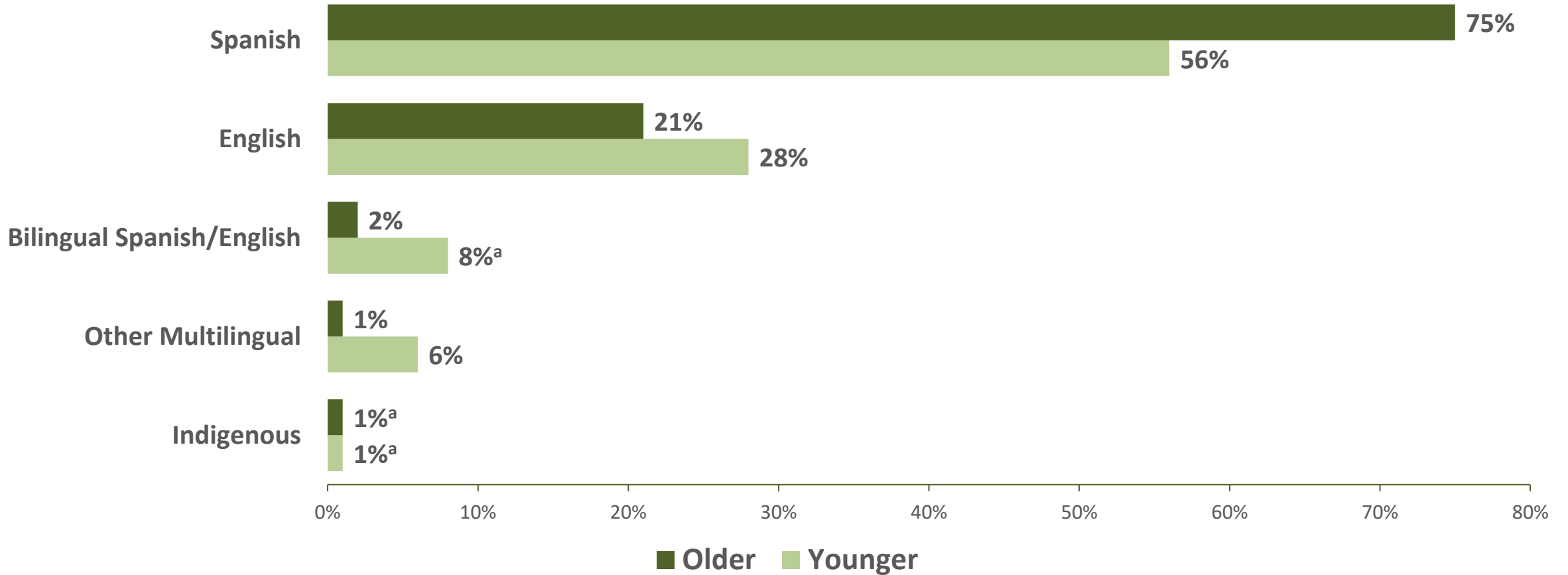
^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

^b Estimates are suppressed because number of responses is less than 4 or relative standard errors for the estimates are greater than 50%.

Primary Language

Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



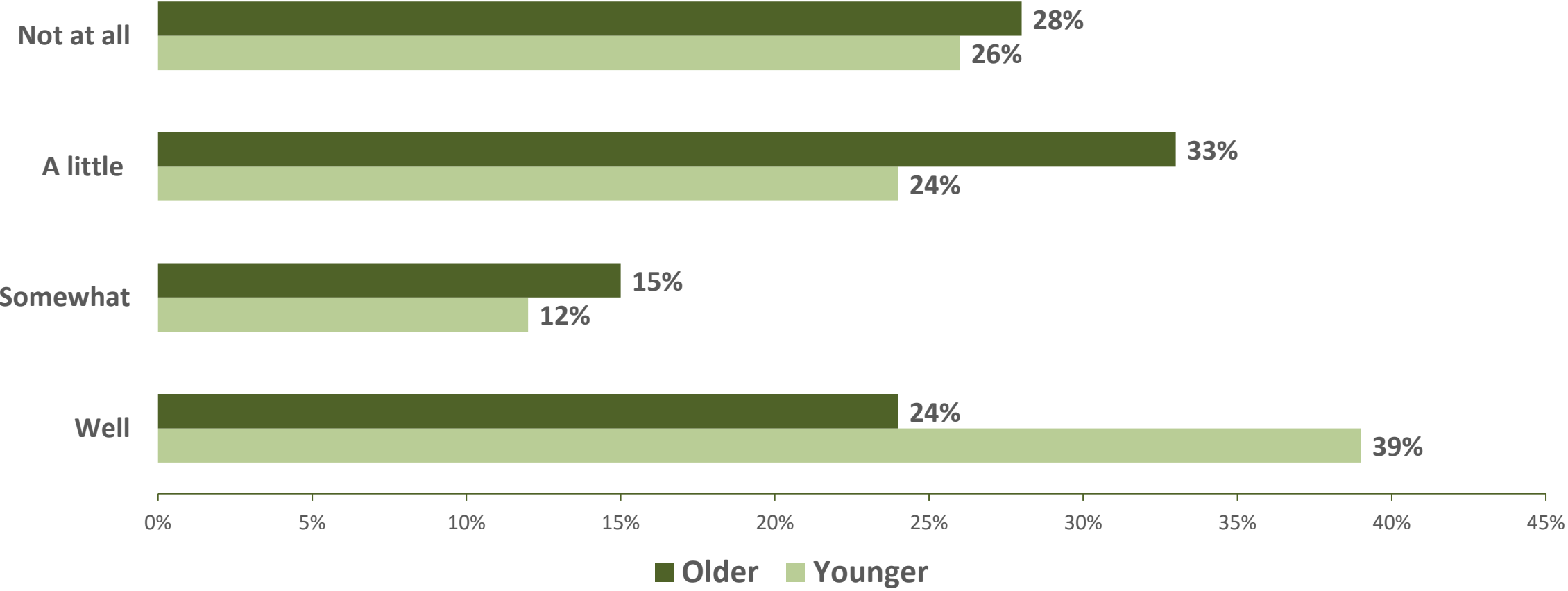
^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

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Farmworkers' Ability to Speak English

Older vs. Younger Farmworkers

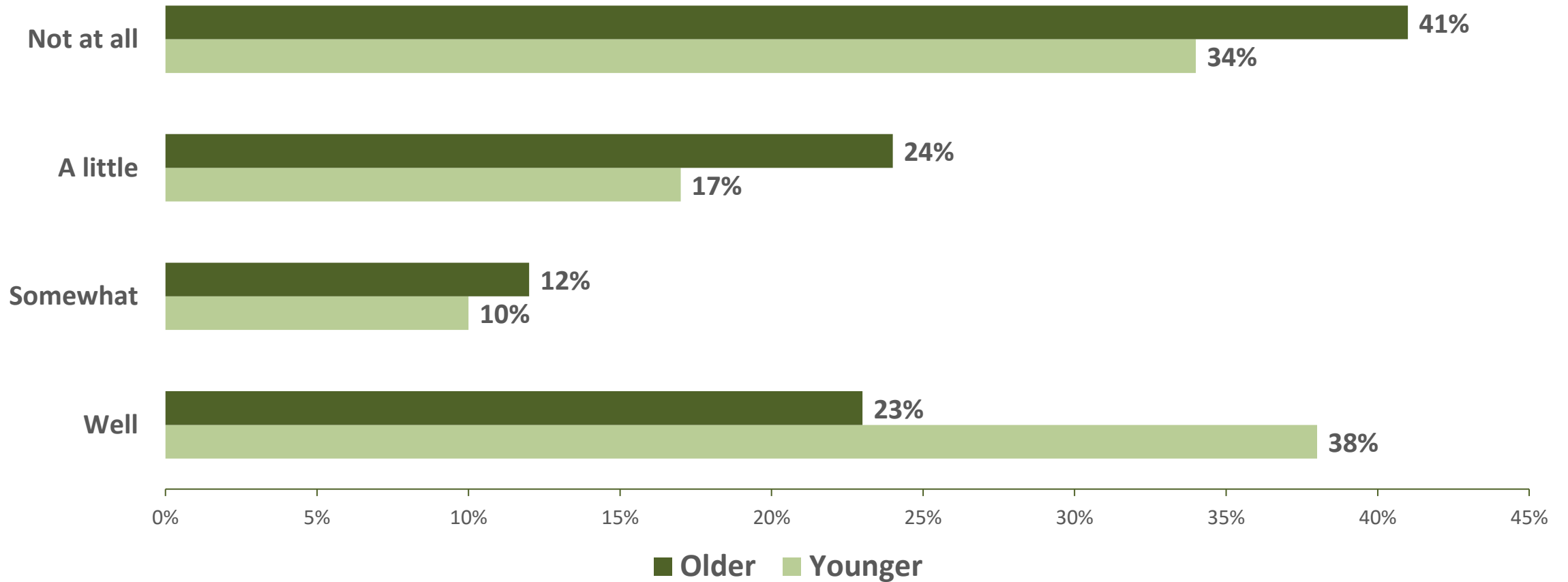
(Source: NAWS 2018-2020)



Farmworkers' Ability to Read English

Older vs. Younger Farmworkers

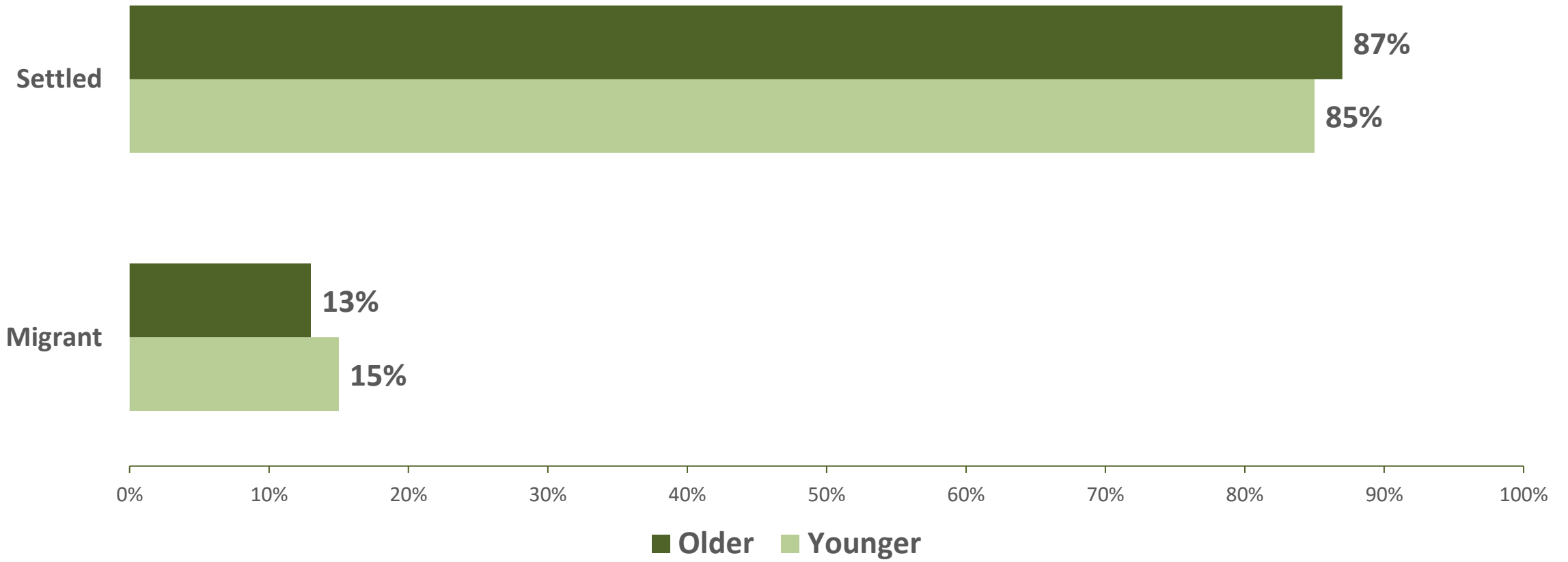
(Source: NAWS 2018-2020)



Migrant Status

Older vs. Younger Farmworkers

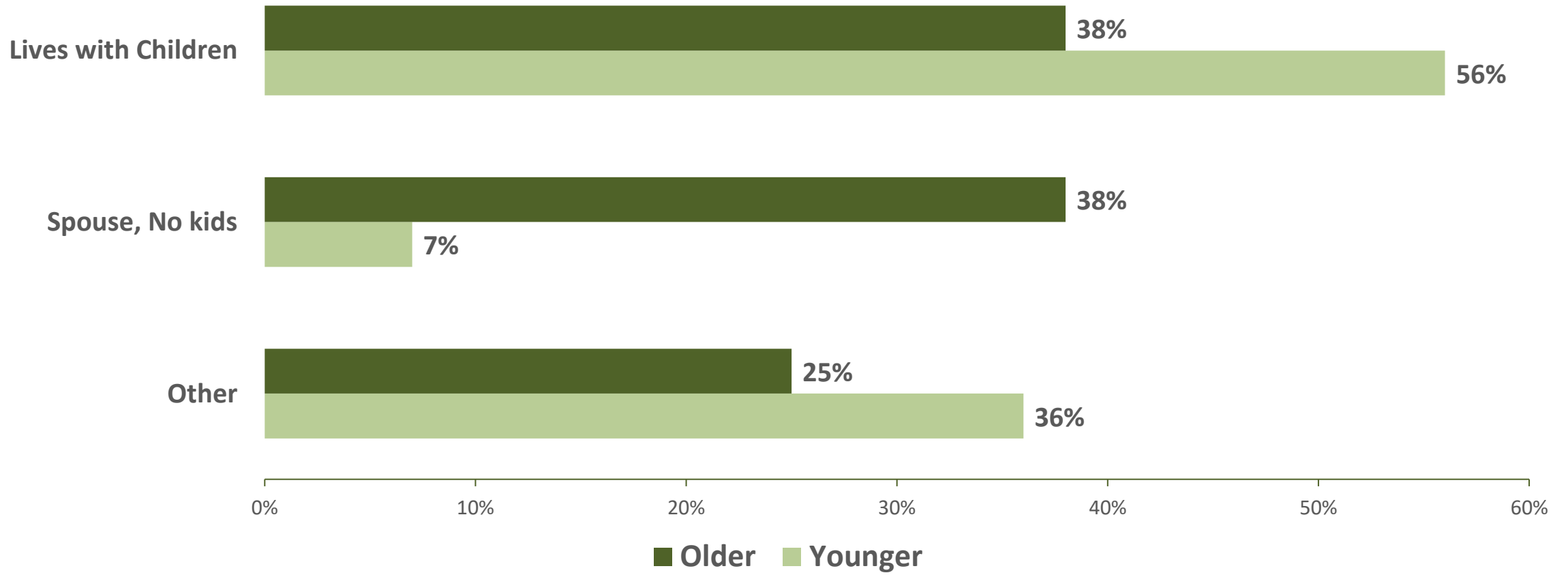
(Source: NAWS 2018-2020)



Household Composition of Farmworkers

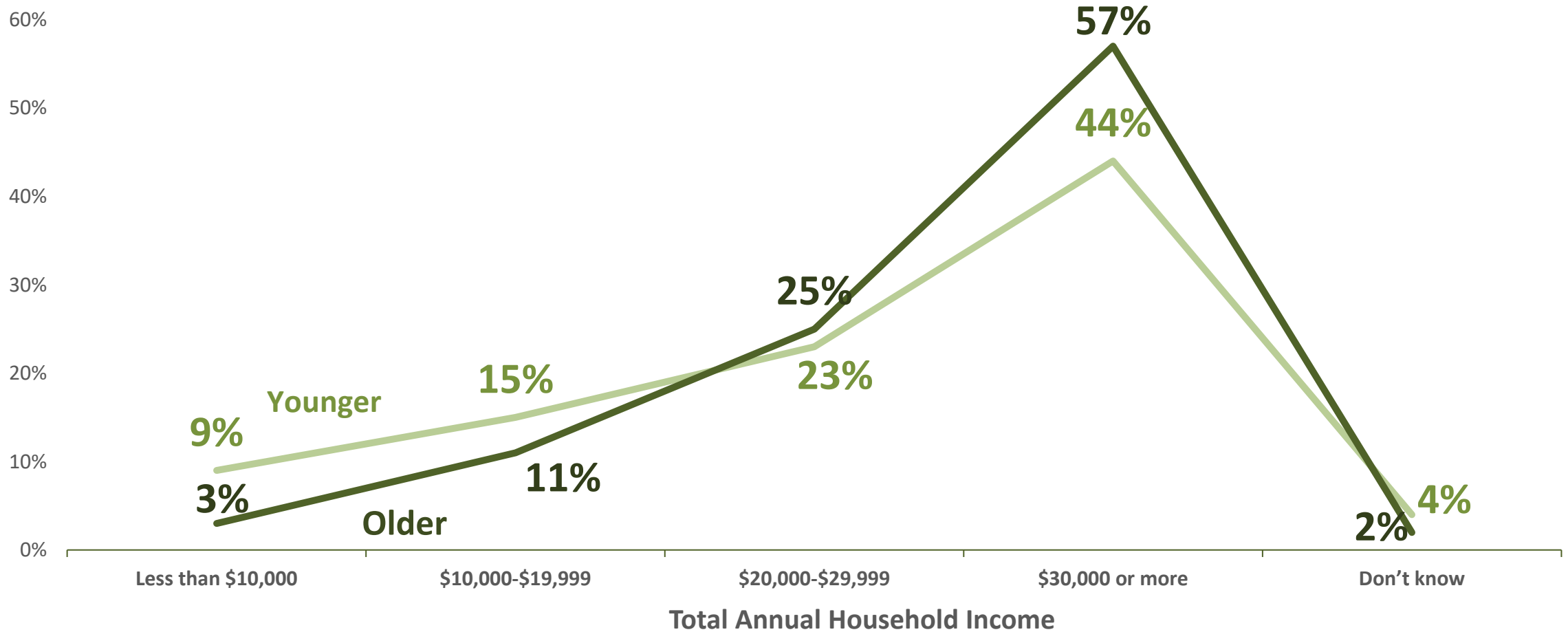
Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Distribution of Total Annual Household Income Older vs. Younger Farmworkers

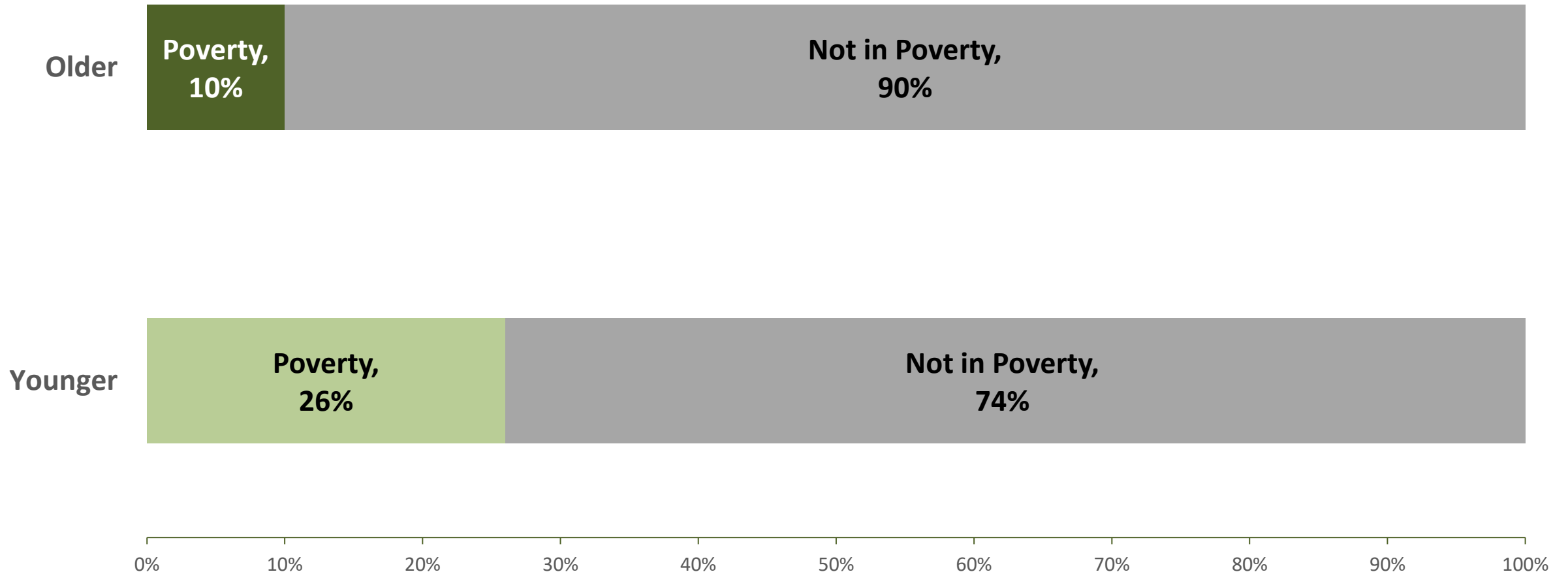
(Source: NAWS 2018-2020)



Poverty Status

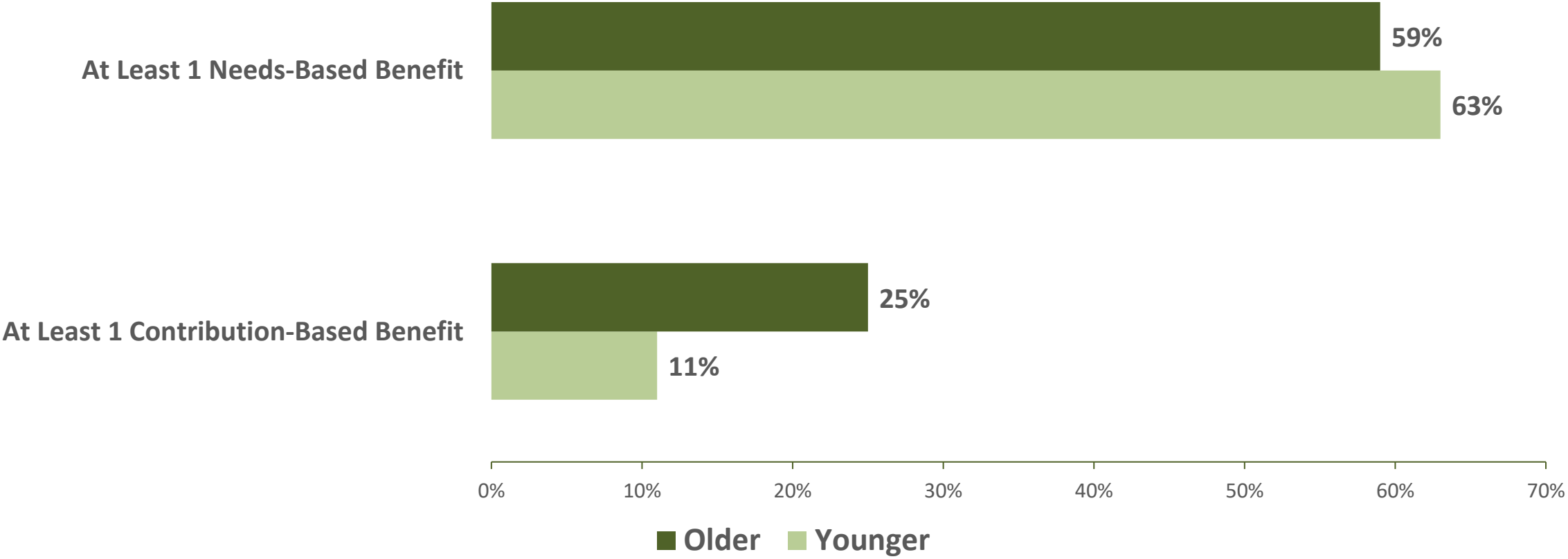
Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Social Services Used by Farmworkers Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

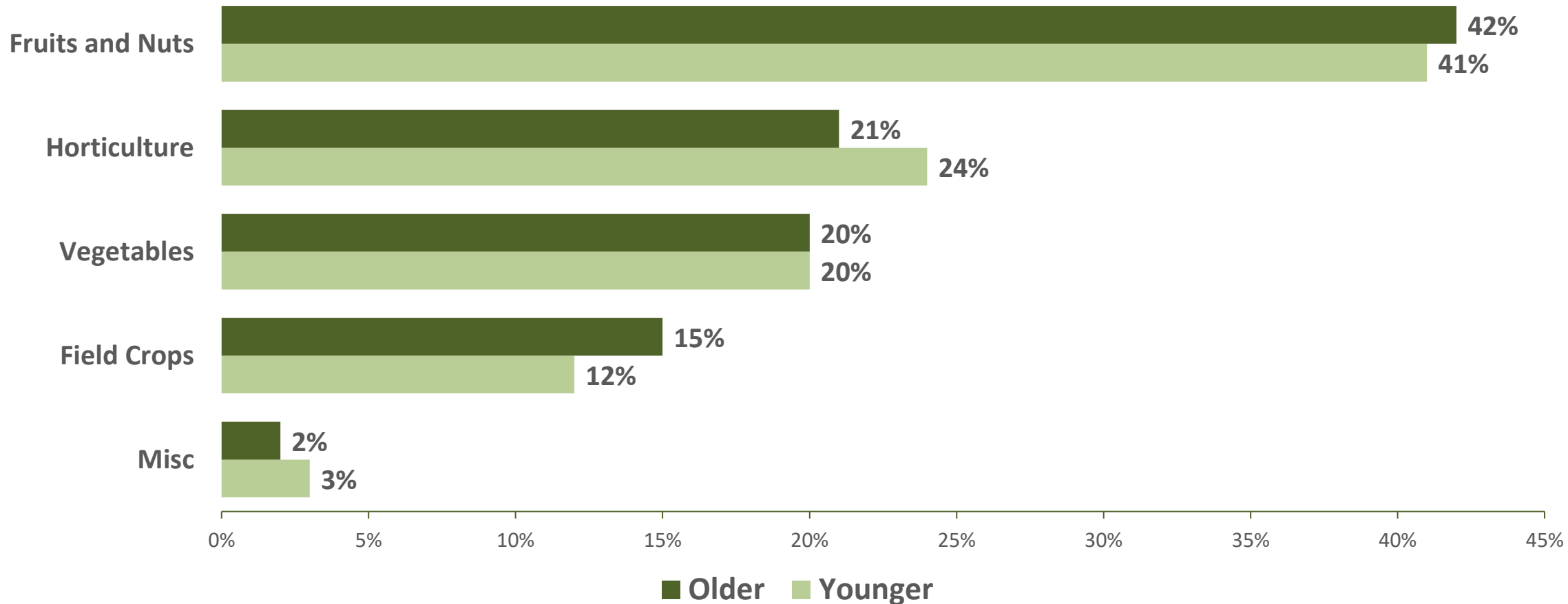




Employment

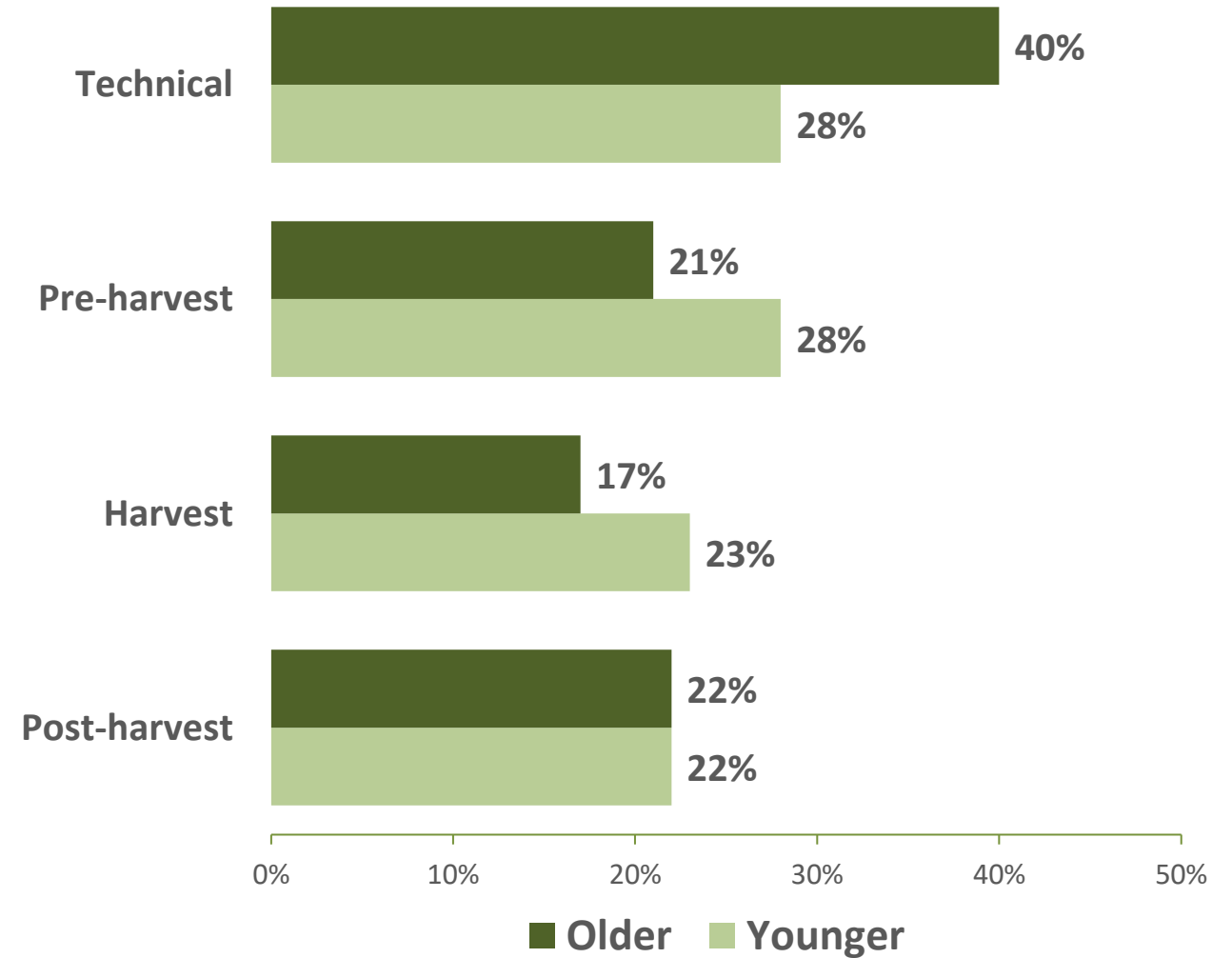
Crop When Interviewed Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



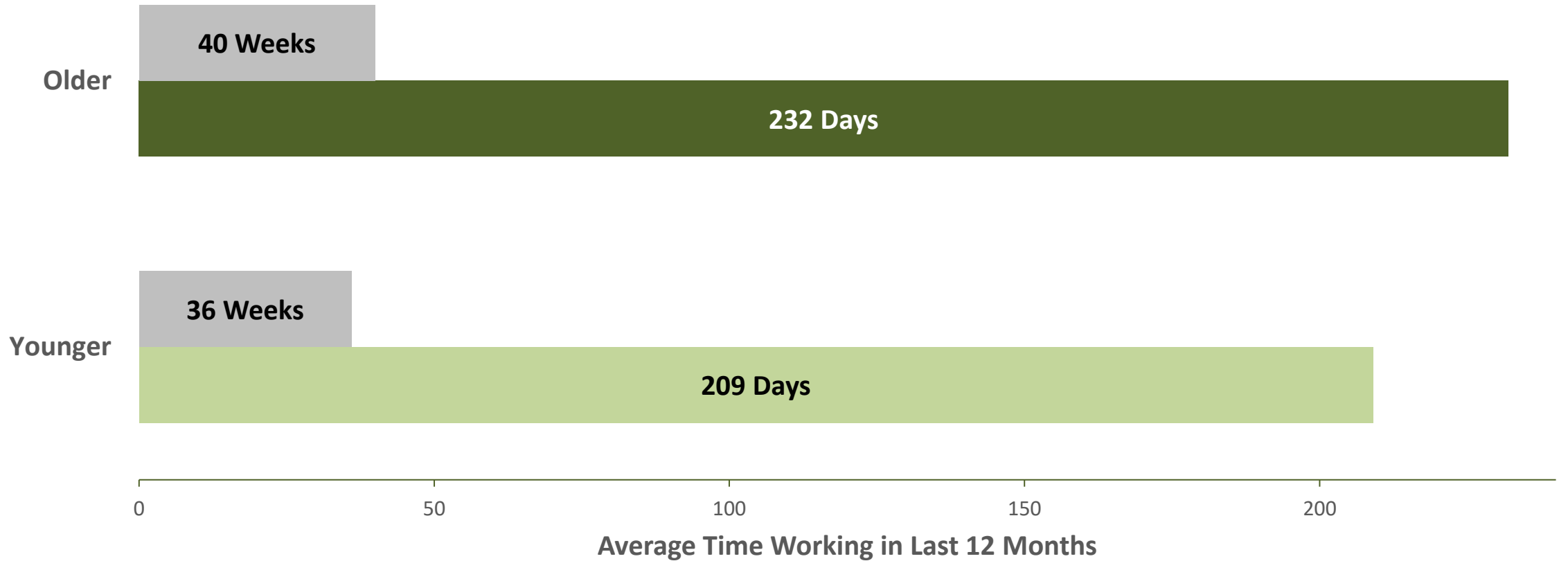
Task When Interviewed Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



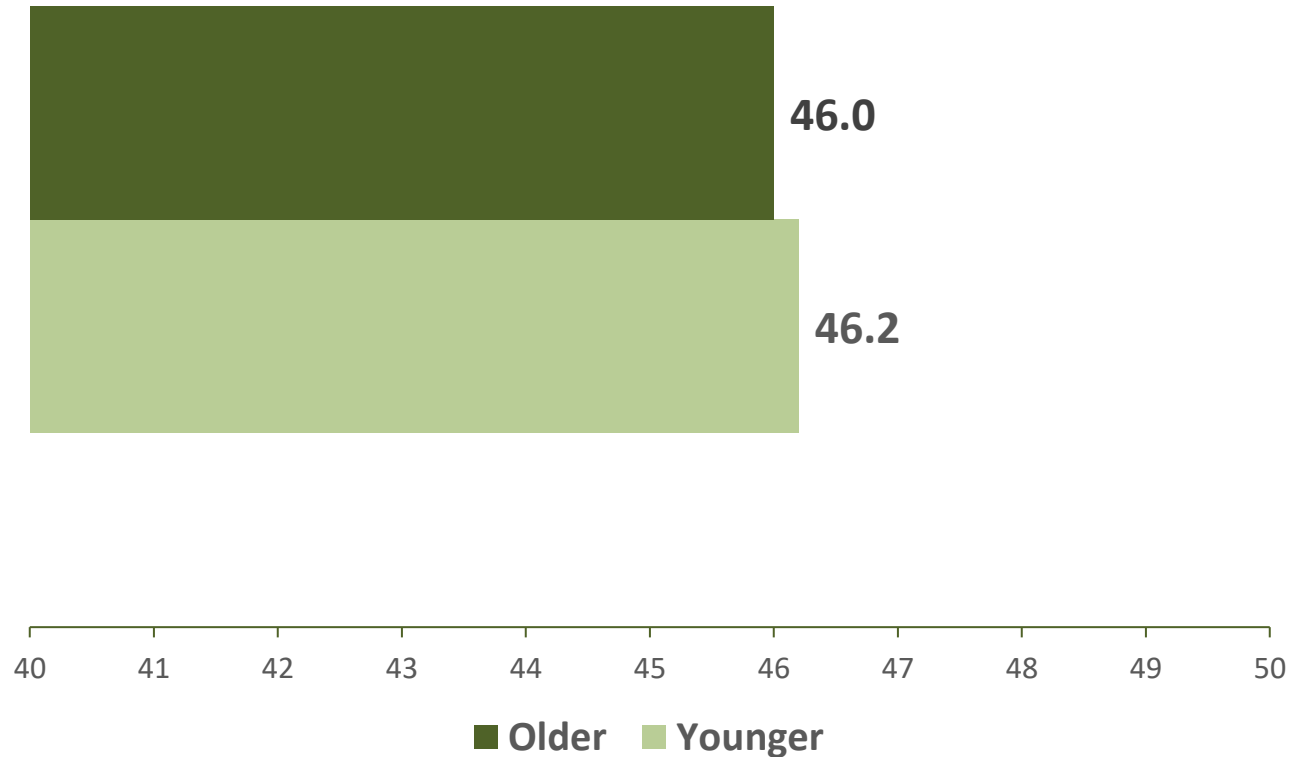
Average Days & Weeks of Farm Work Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



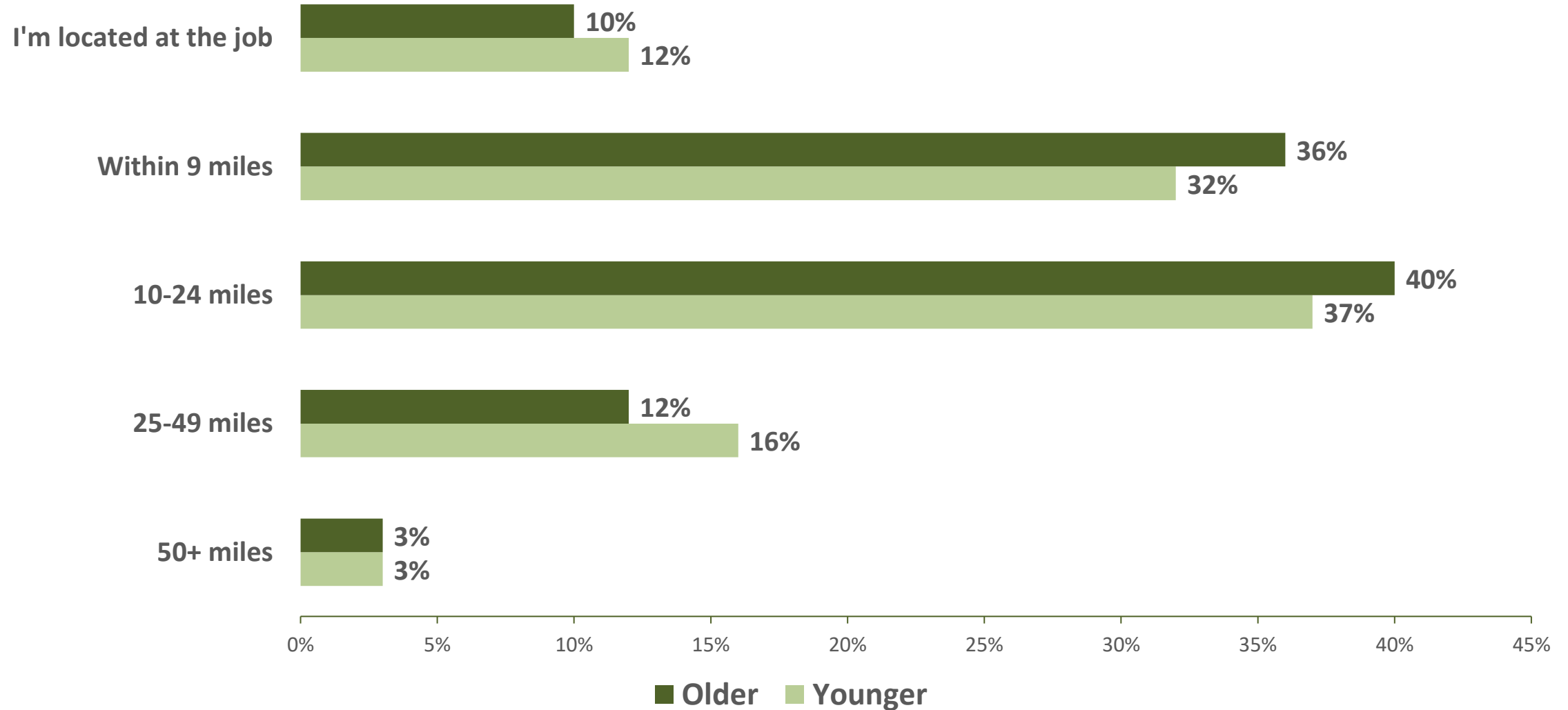
Average Hours Worked Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



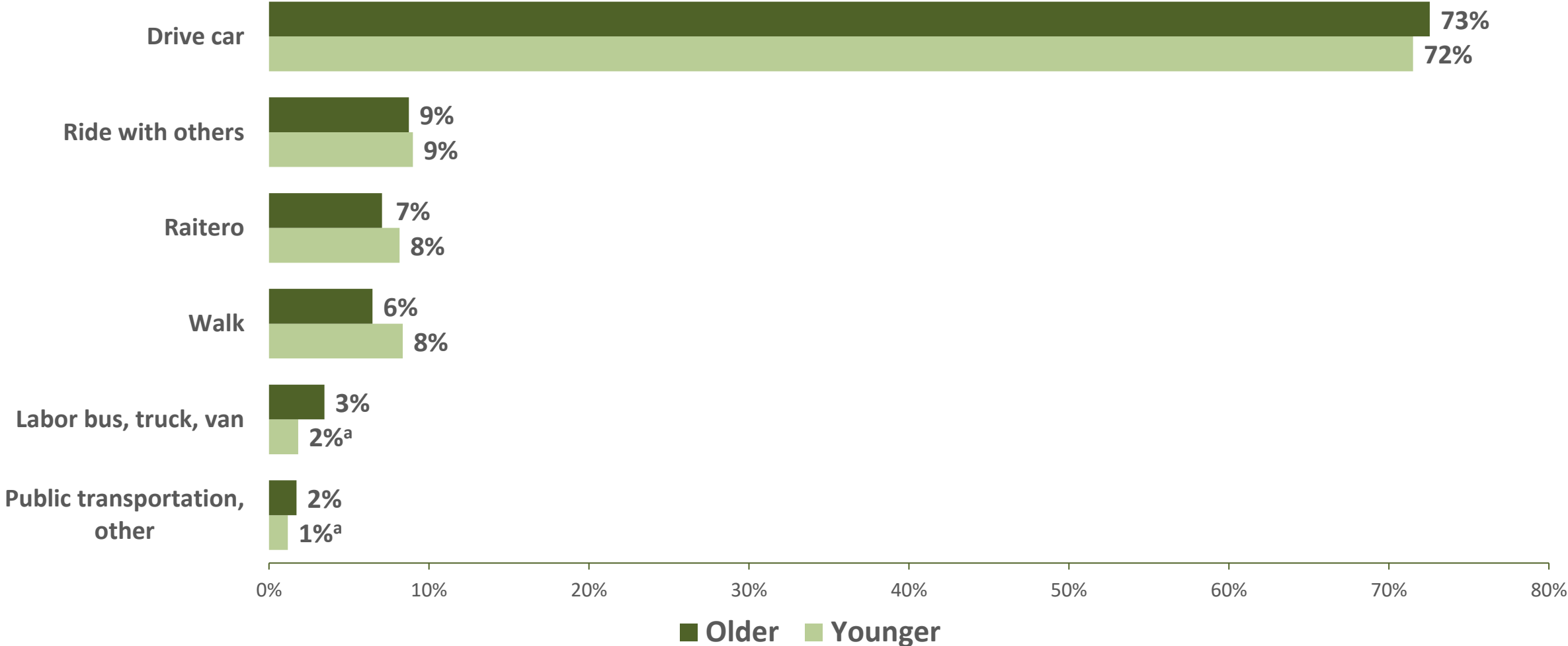
Distance from Place of Work Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Type of Transportation to Work Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

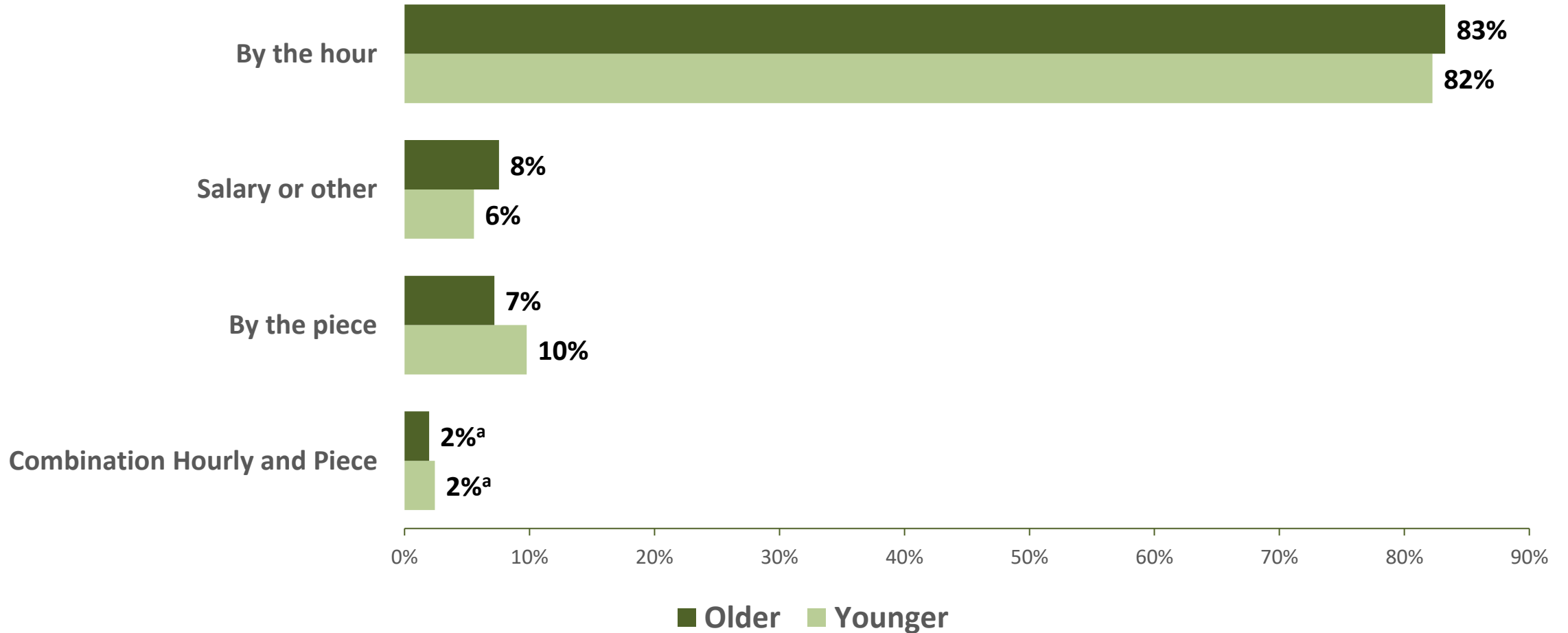


^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

Basis of Pay

Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

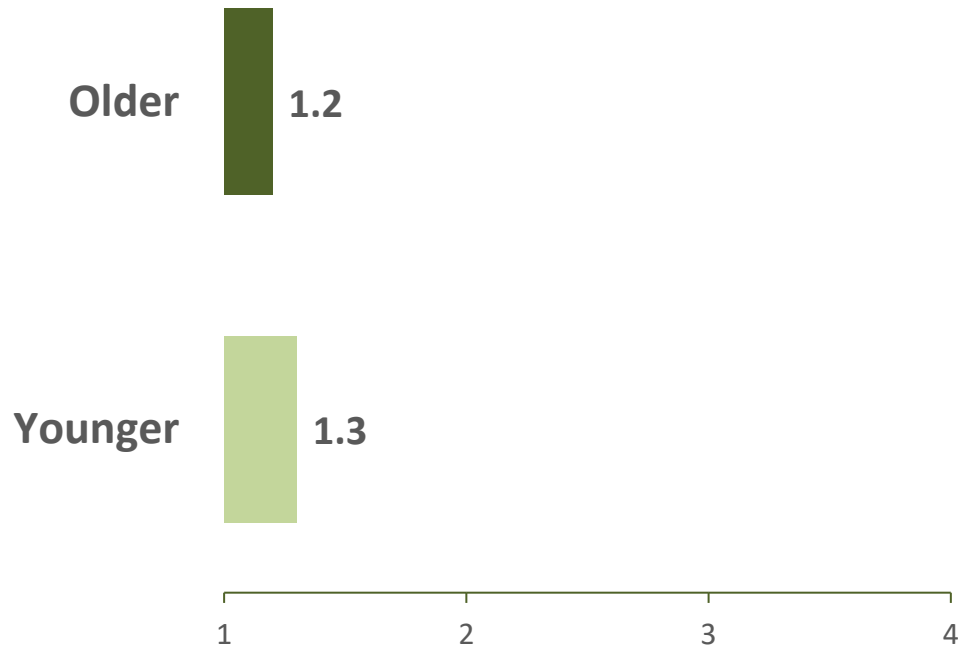


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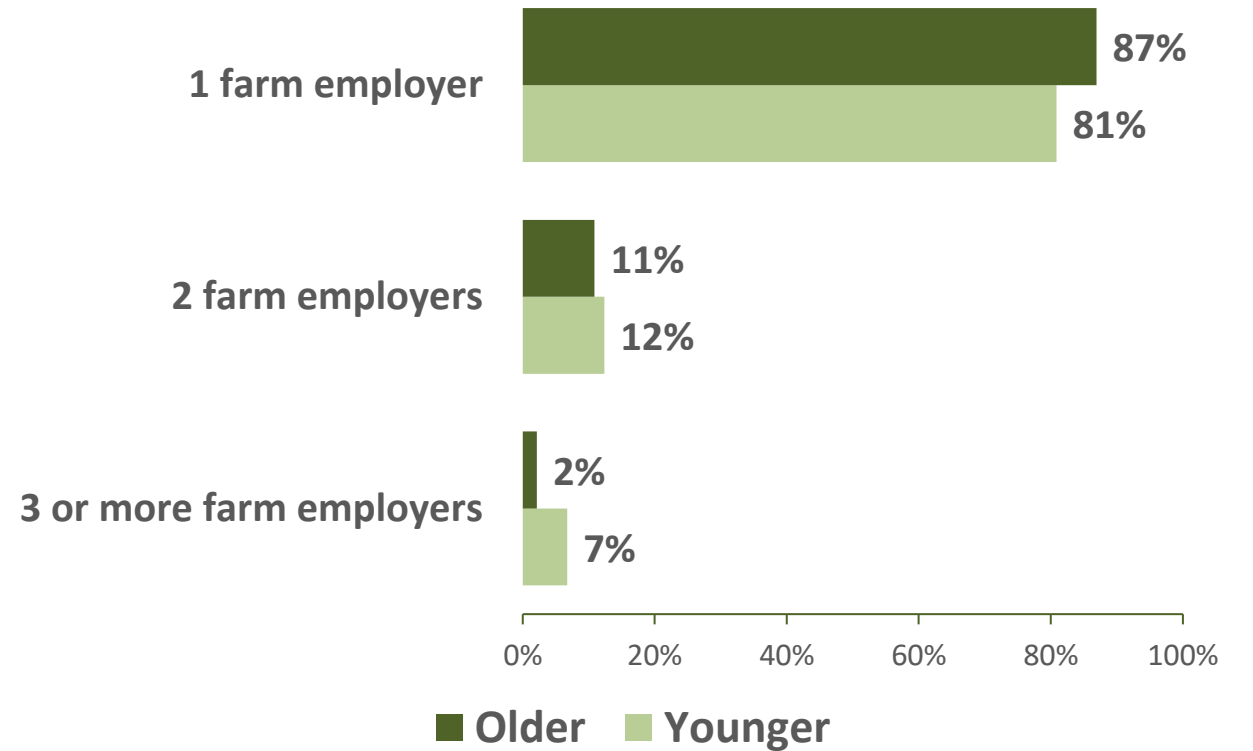
Number of Farm Employers Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

Average Number of Farm Employers

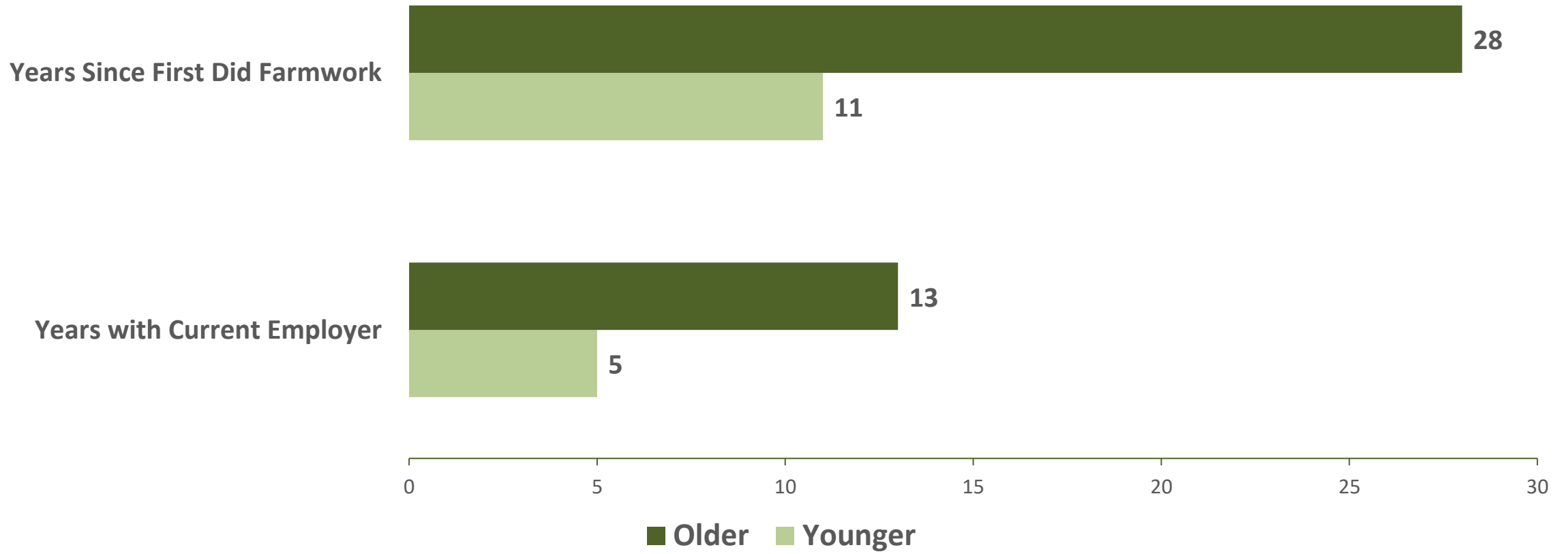


Distribution of Number of Farm Employers



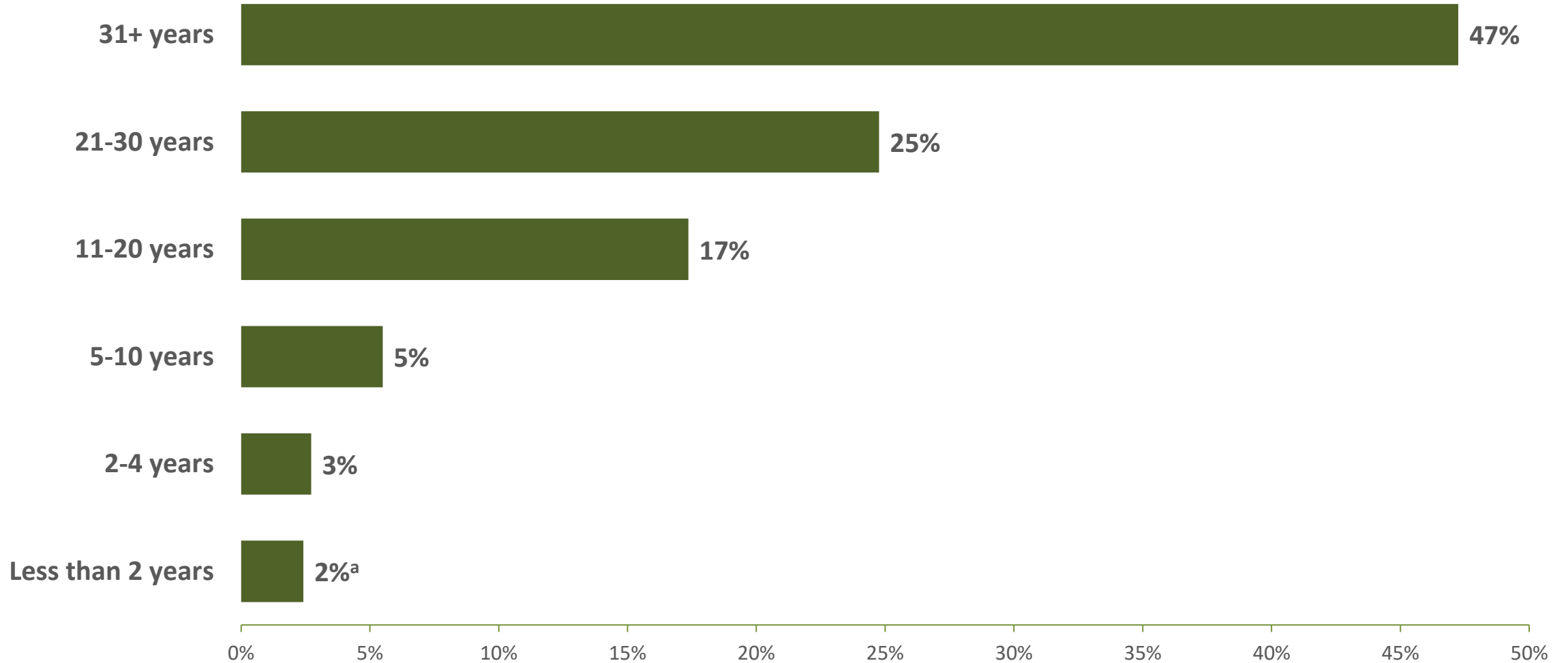
Average Number of Years with Current Employer and in the Farm Labor Force Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Distribution of Number of Years In Farm Work of Older Workers

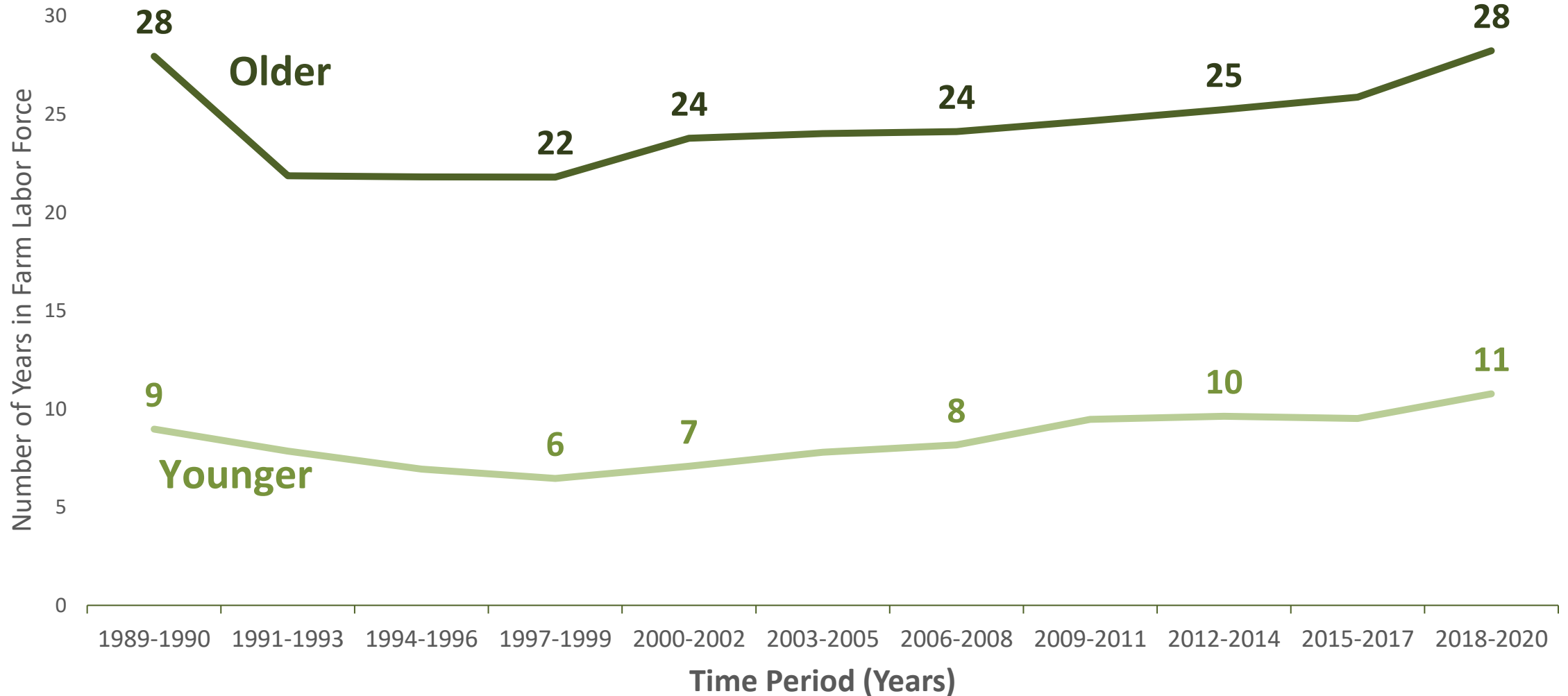
(Source: NAWS 2018-2020)



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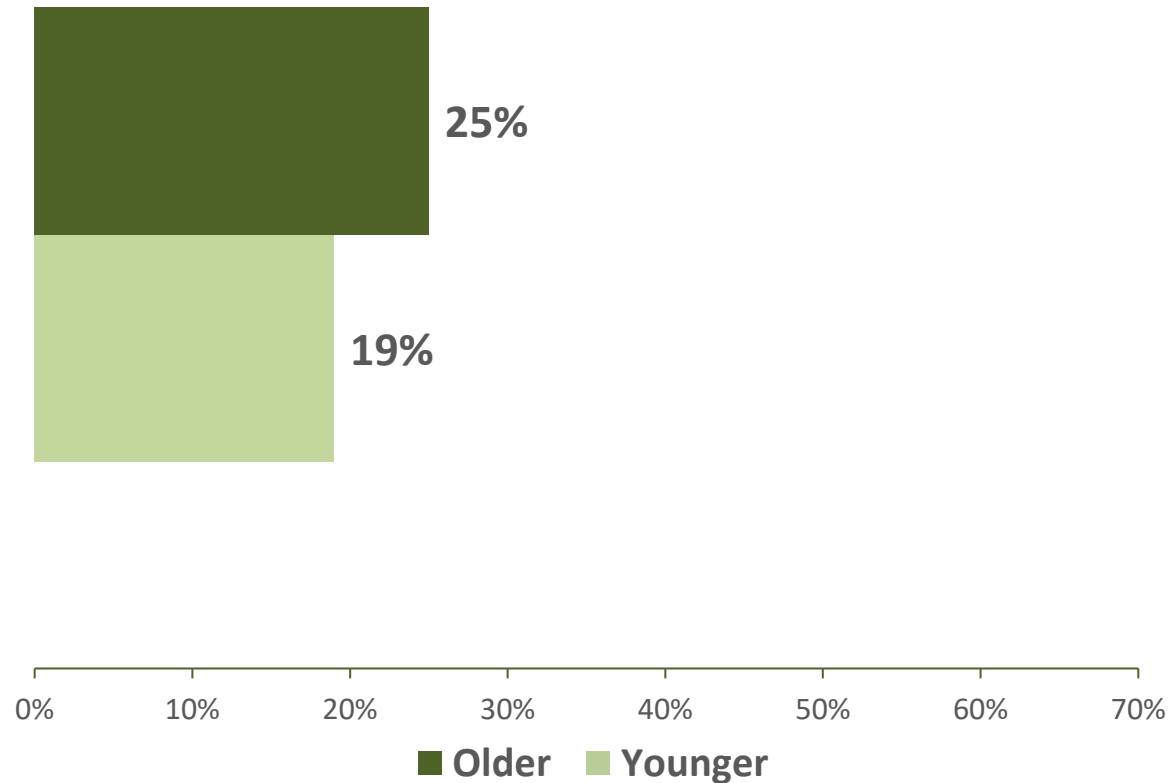
Trends of Number of Years In Farm Labor Force Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



In the Last 12 months, Pesticide Use¹ Older vs. Younger Farmworkers

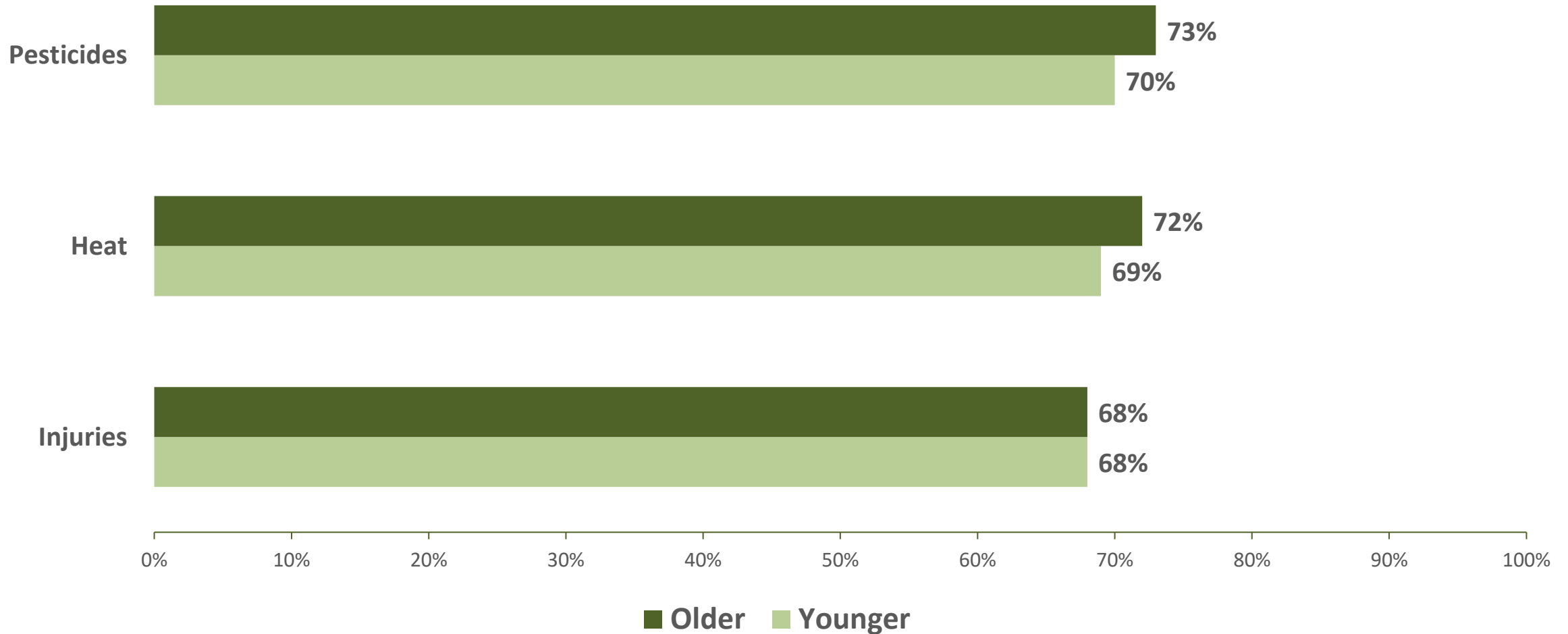
(Source: NAWS 2018-2020)



¹ Pesticide use included whether the respondent mixed, loaded, or applied pesticides.

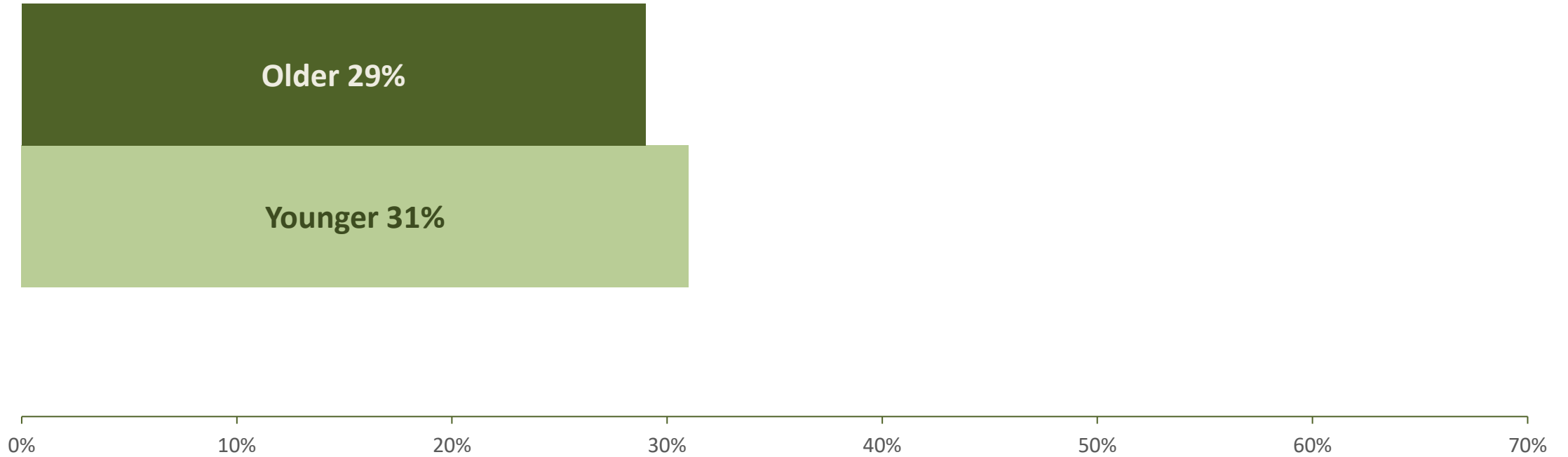
Type of Safety Training Received Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



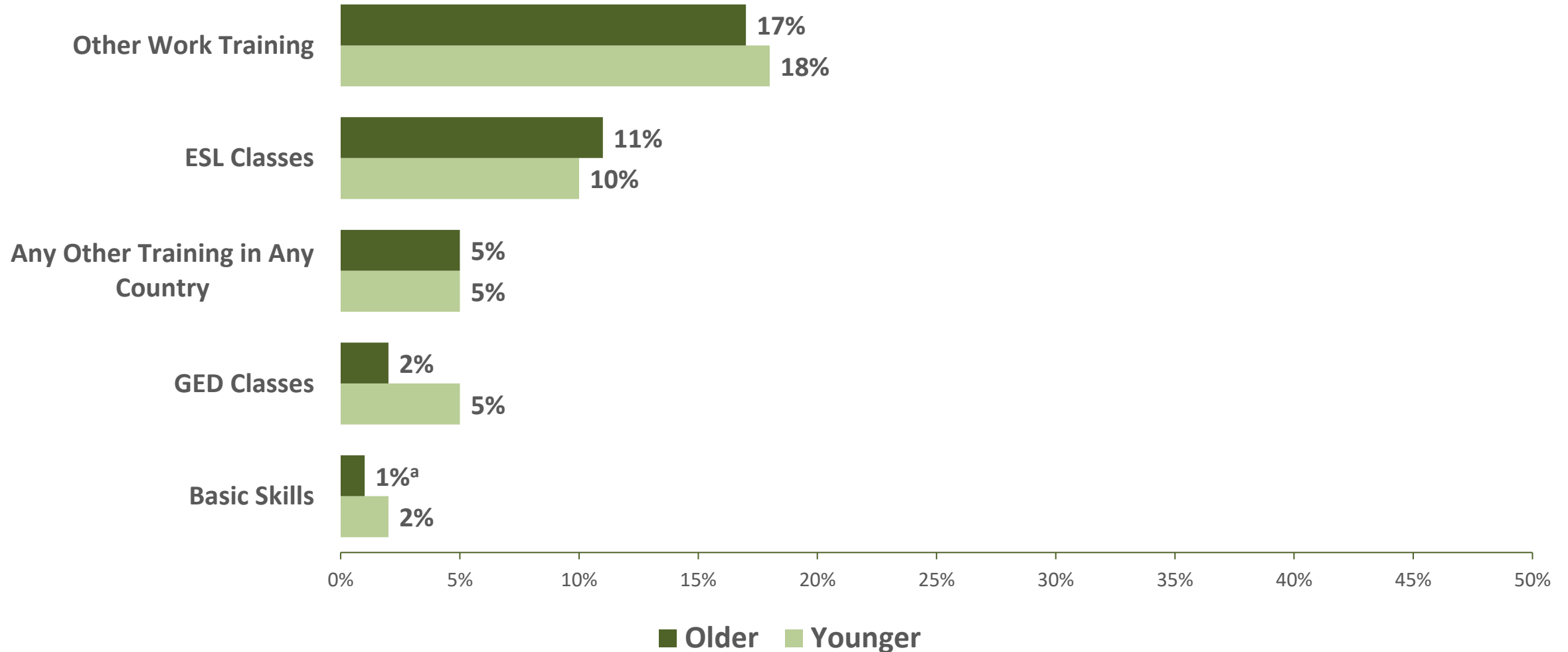
Proportion That Took at Least One Non-Safety Education or Training Course Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Type of Non-Safety Education or Training Received Older vs. Younger Farmworkers

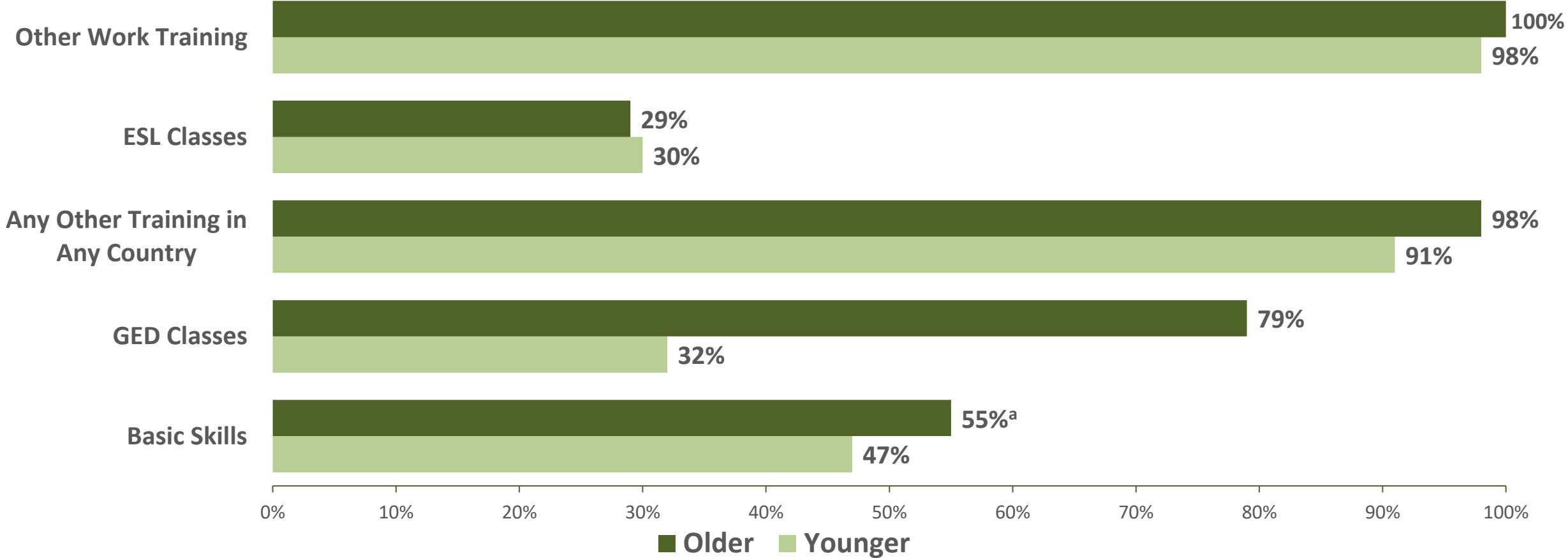
(Source: NAWS 2018-2020)



^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

Proportion that Completed Non-Safety Education & Training Older vs. Younger Farmworkers

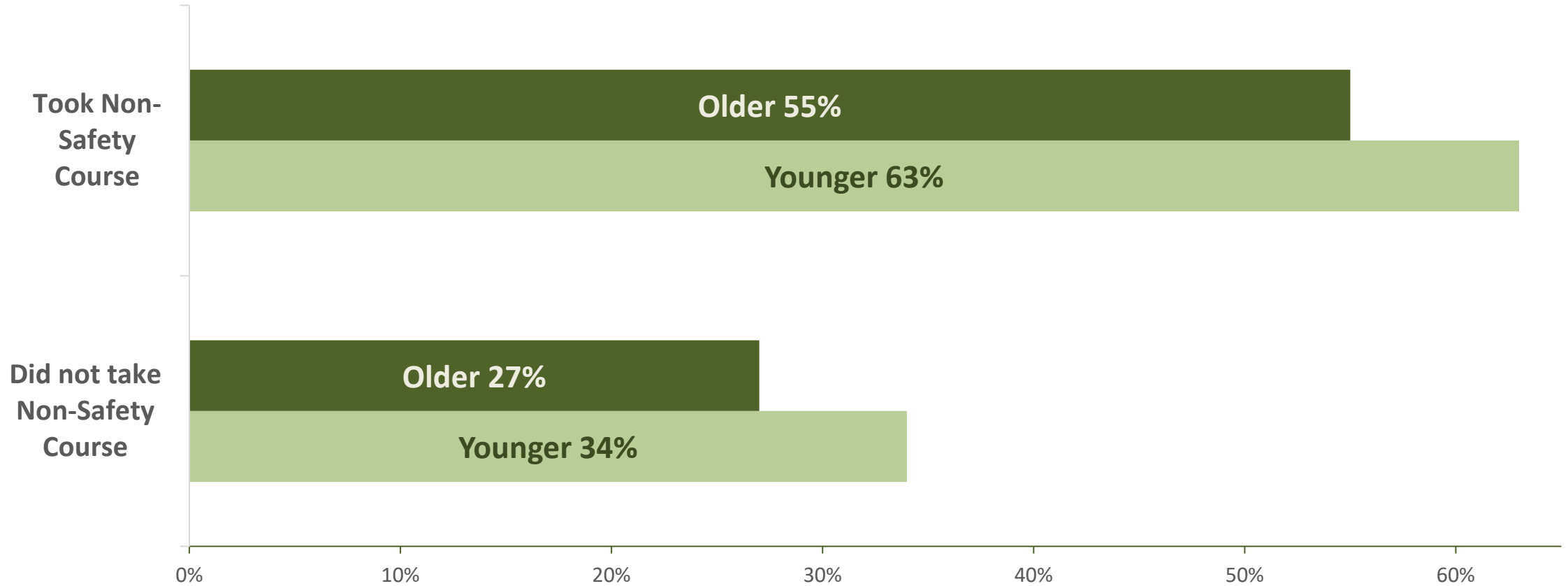
(Source: NAWS 2018-2020)



^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

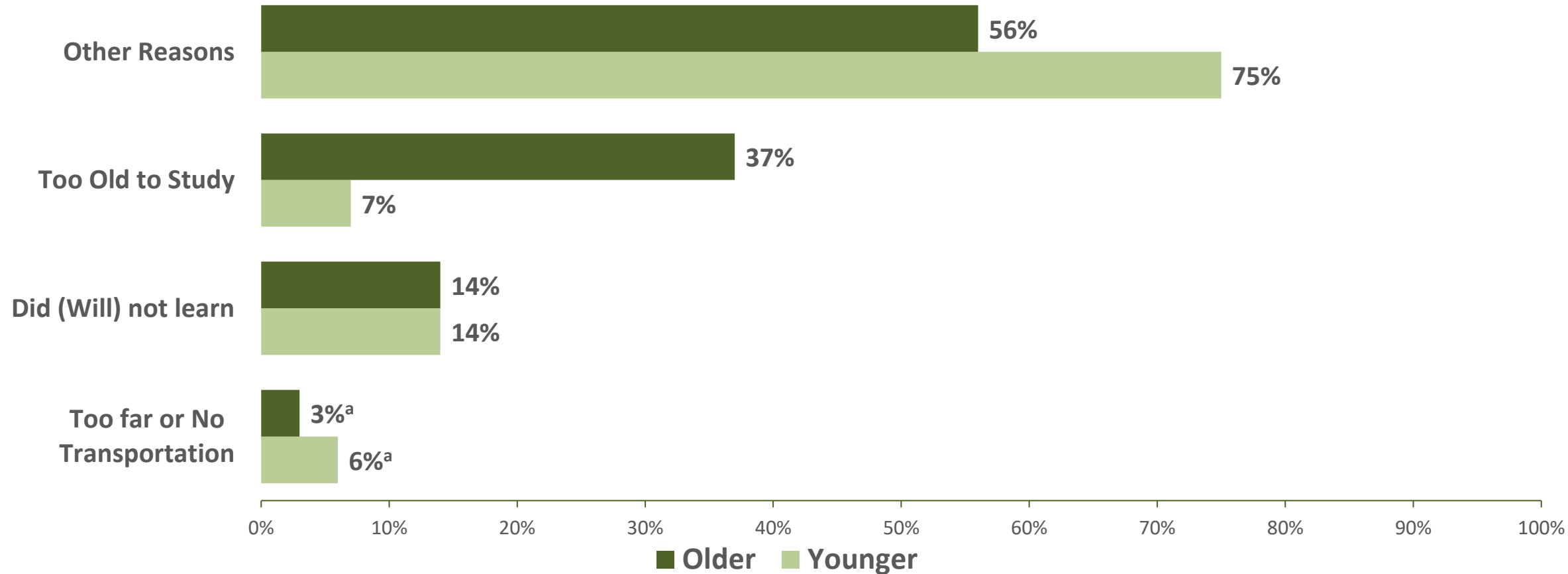
Confidence in Obtaining a Better Job Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Barriers in Attending Education Classes & Training Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



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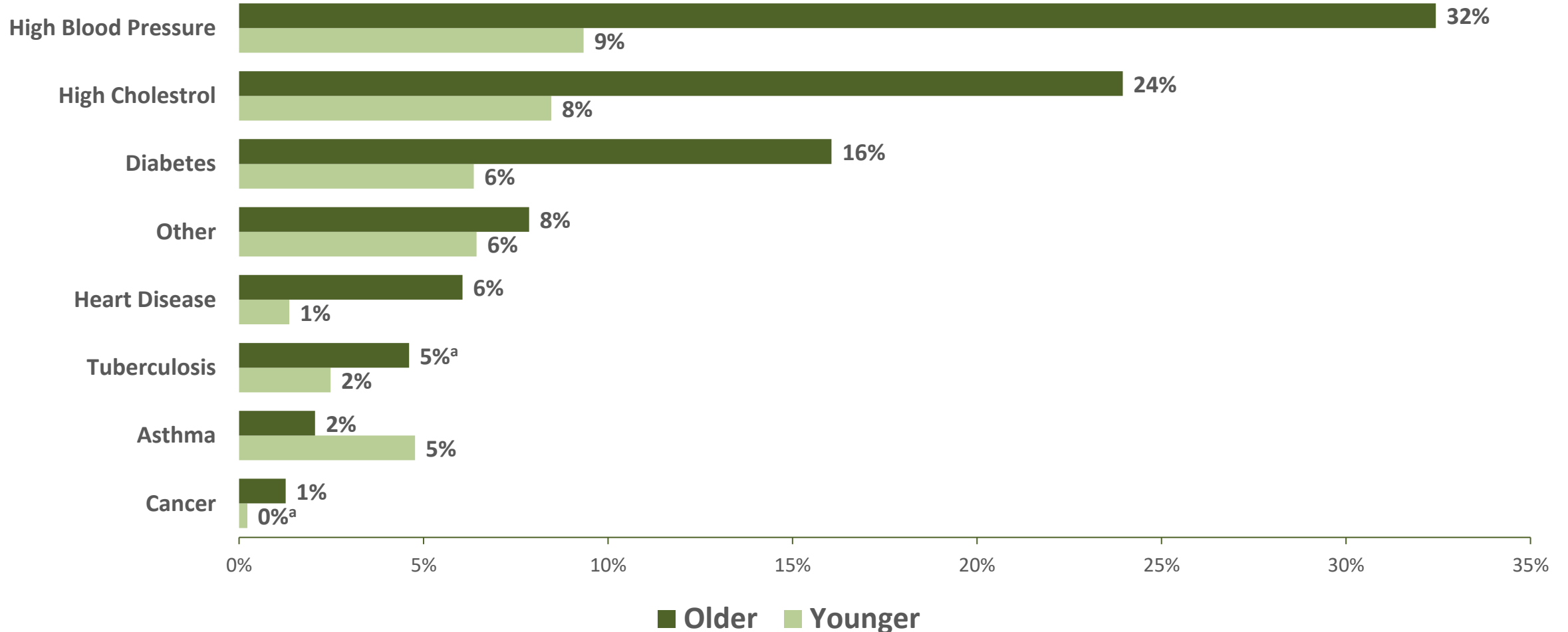


Health and Healthcare Trends

Chronic Conditions

Older vs. Younger Farmworkers

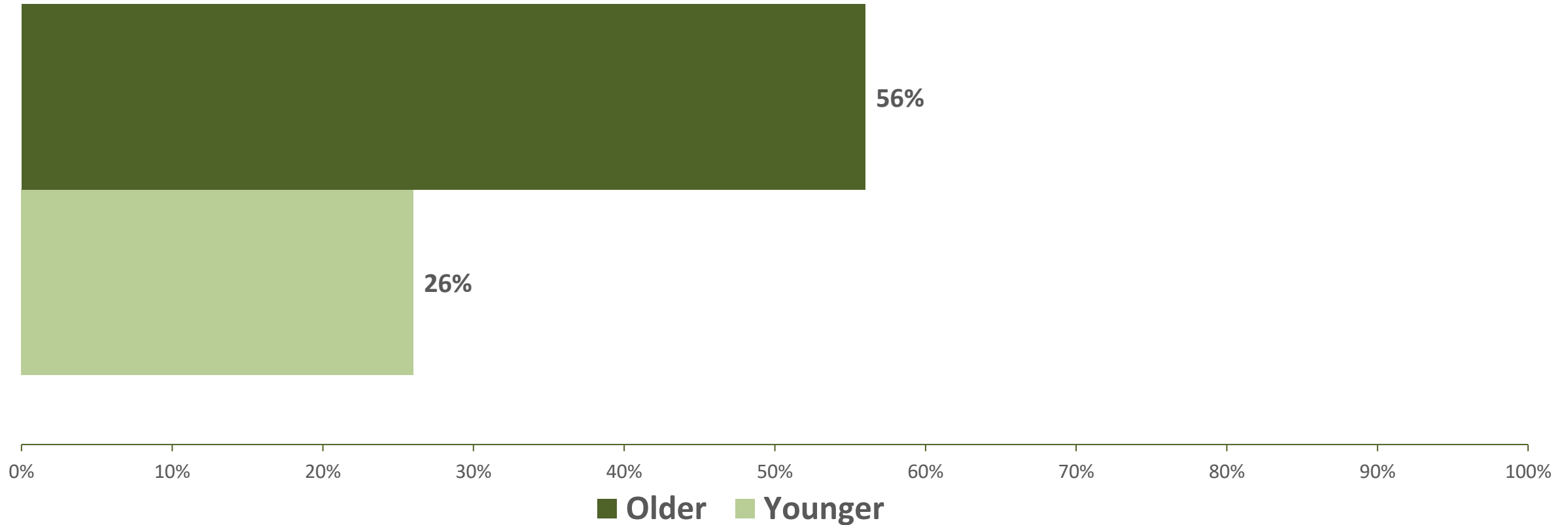
(Source: NAWS 2018-2020)



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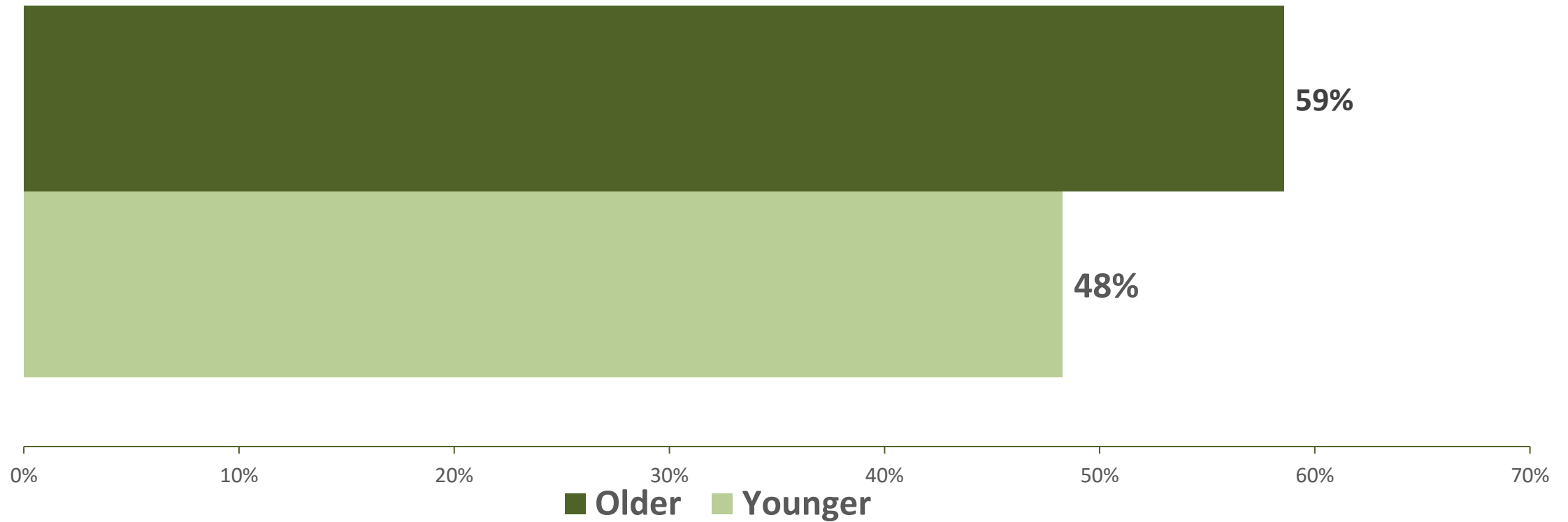
Prevalence of Chronic Diseases Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



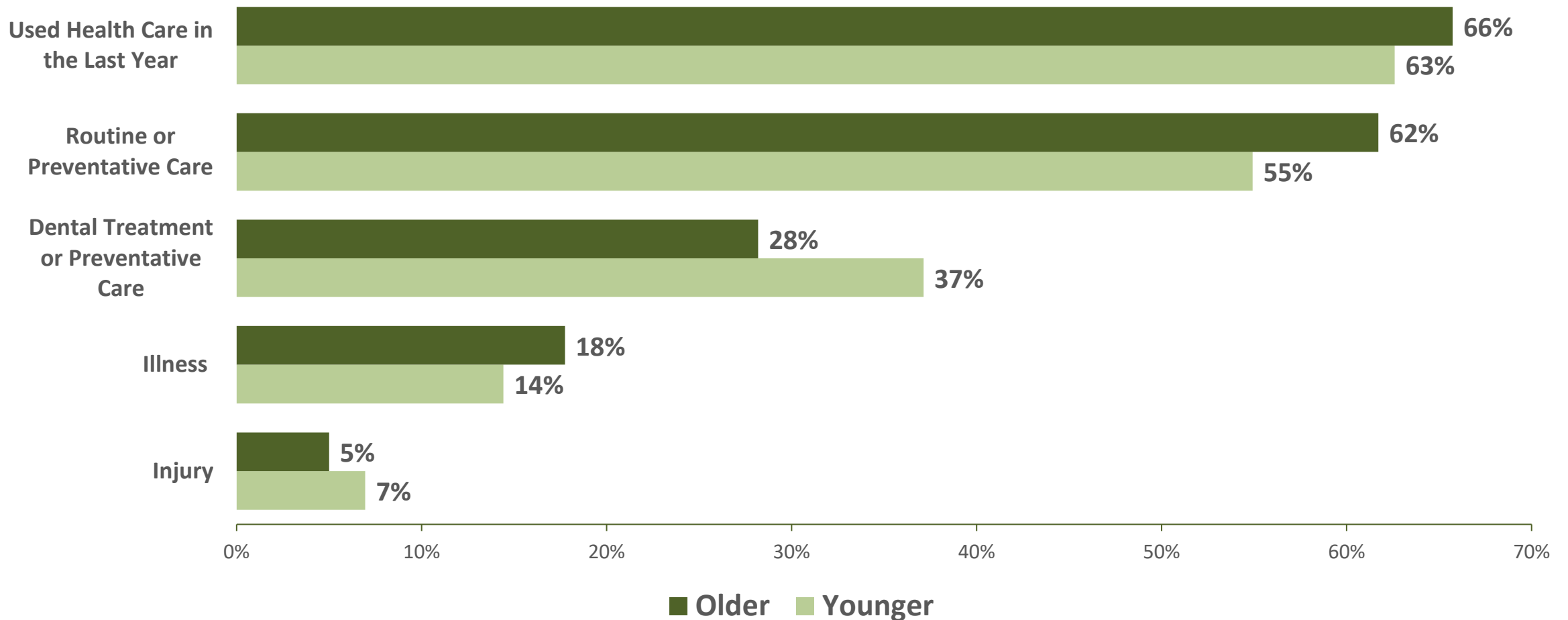
Health Insurance Coverage Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



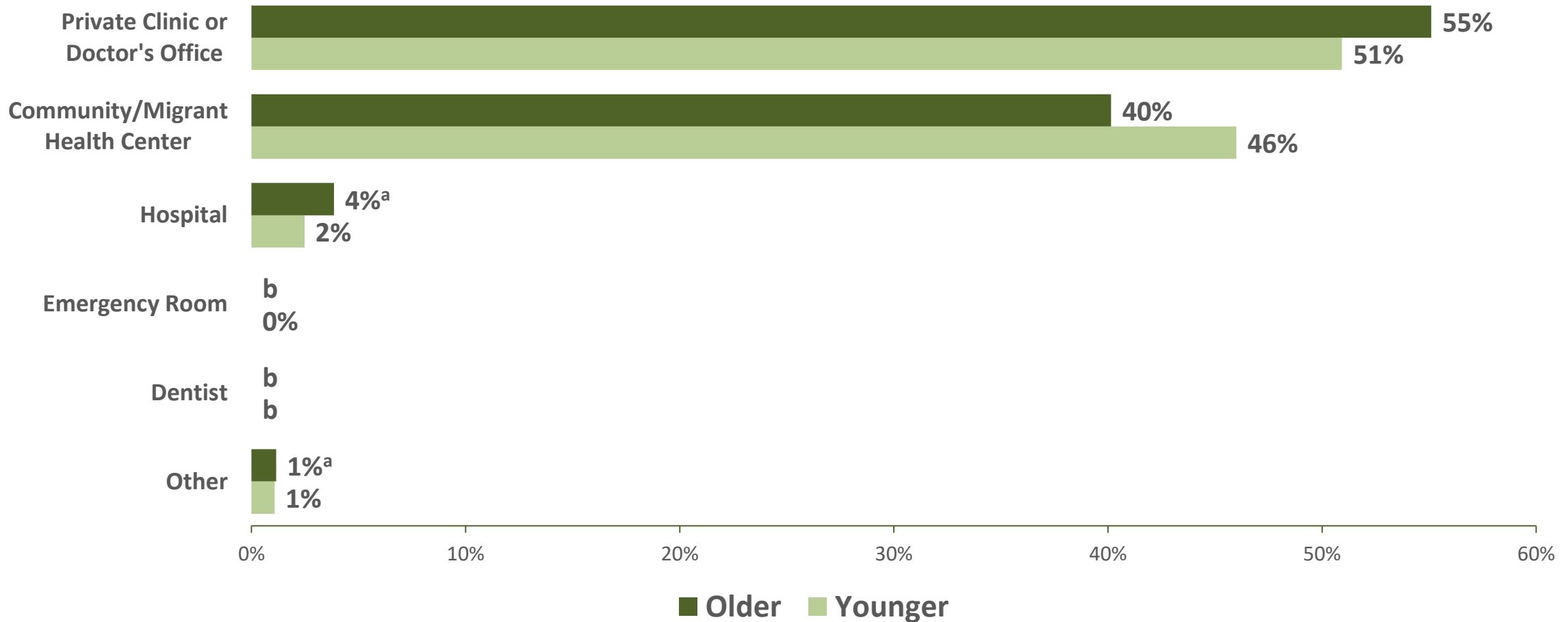
Utilization of Health Care Older vs. Younger Workers

(Source: NAWS 2018-2020)



Location of Last Preventative or Routine Health Care Visit Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

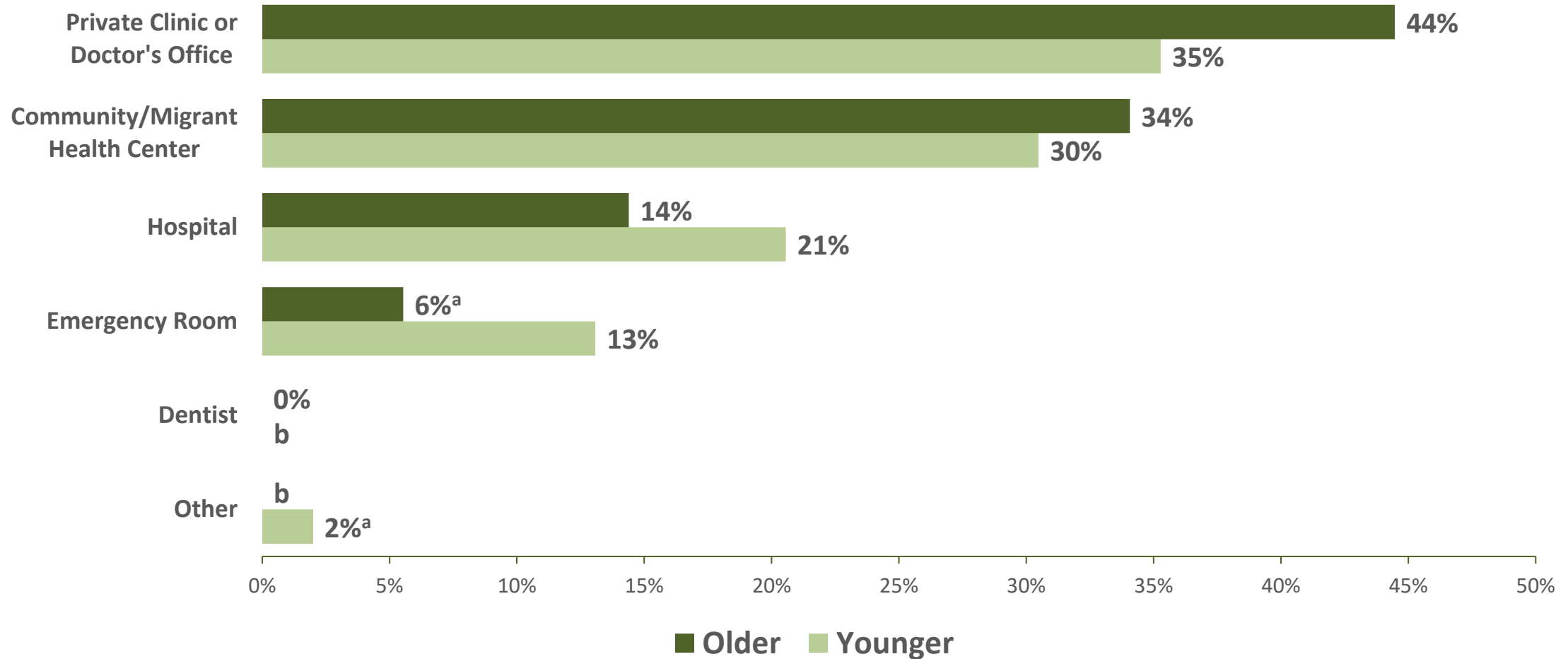


^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

^b Estimates are suppressed because number of responses is less than 4 or relative standard errors for the estimates are greater than 50%.

Location of Last Illness Health Care Visit Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

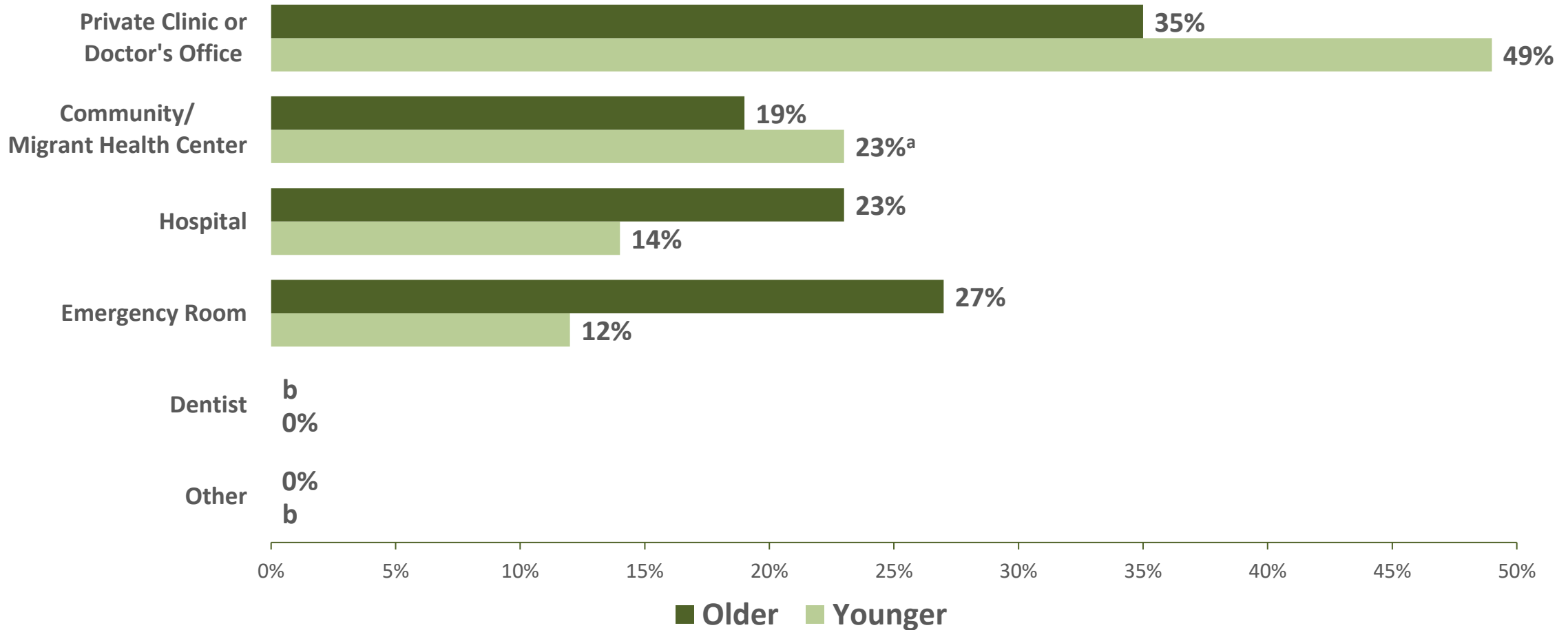


^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

^b Estimates are suppressed because number of responses is less than 4 or relative standard errors for the estimates are greater than 50%.

Location of Last Injury Health Care Visit Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

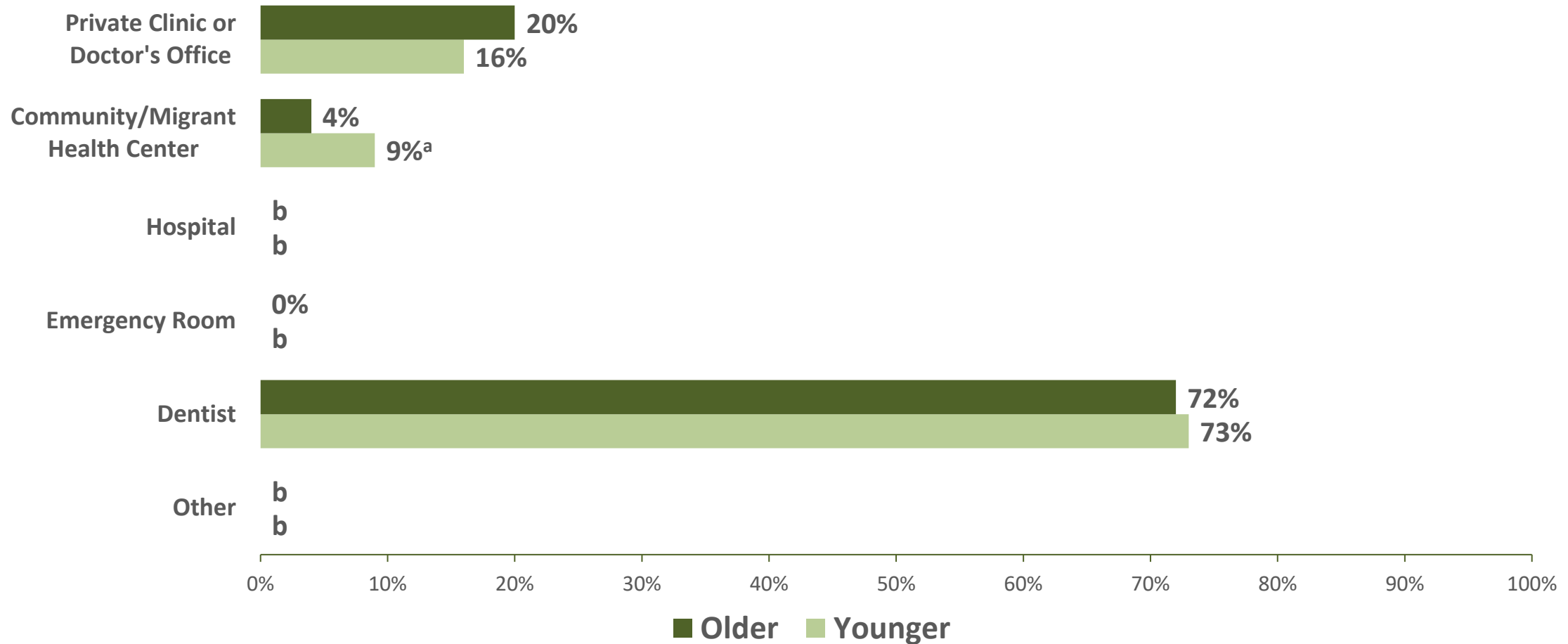


^a Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

^b Estimates are suppressed because number of responses is less than 4 or relative standard errors for the estimates are greater than 50%.

Location of Last Dental Care Visit Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)

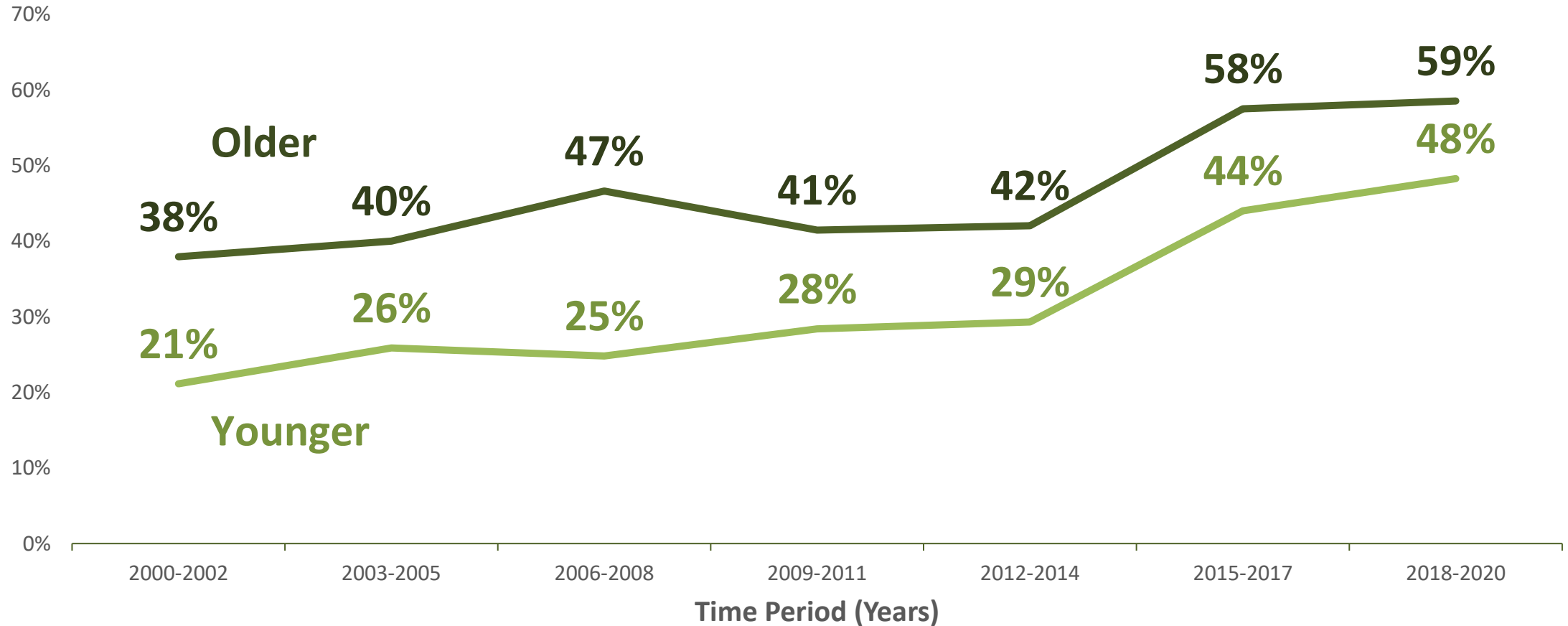


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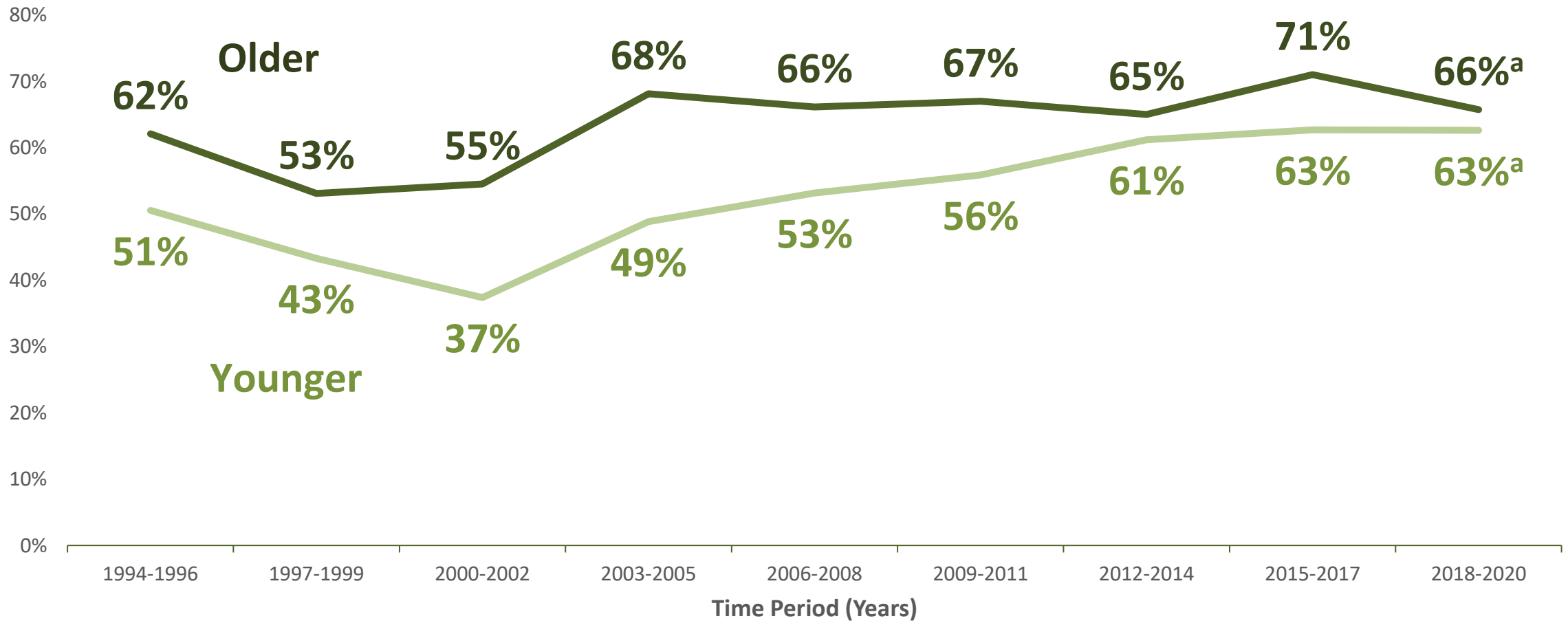
Trends of Health Insurance Coverage Older vs. Younger Farmworkers

(Source: NAWS 1989-2020)



Trends in Utilization of Health Care Older vs. Younger Farmworkers

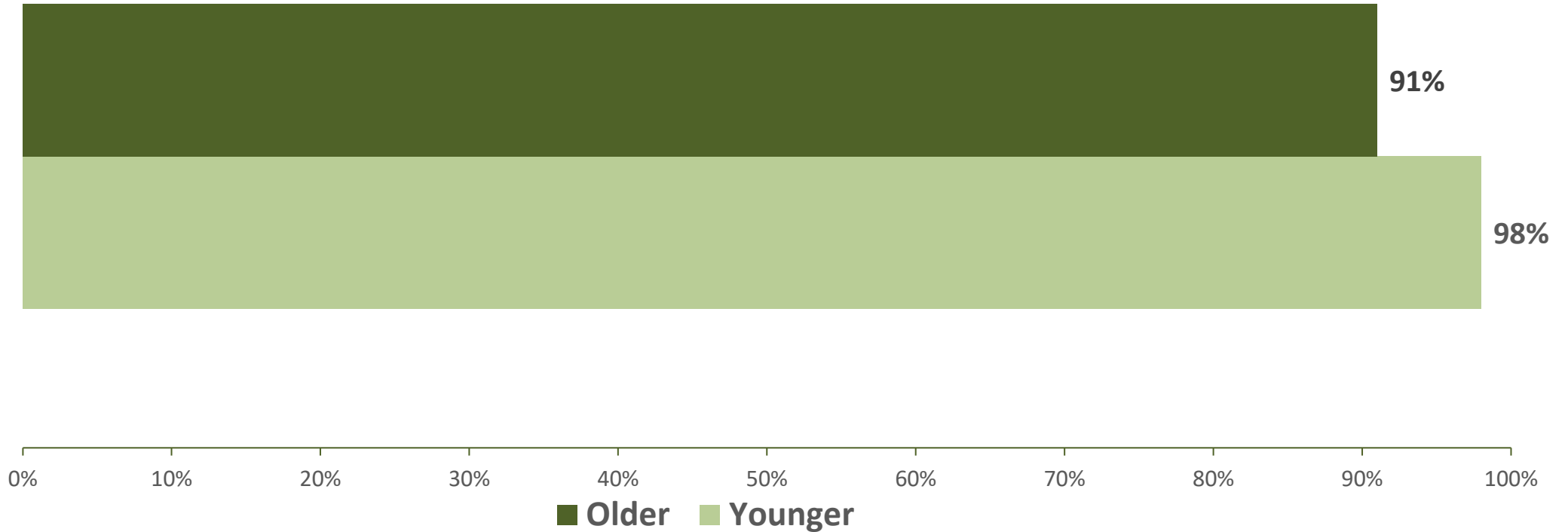
(Source: NAWS 1989-2020)



^a The utilization of health care variable was analyzed for fiscal years 1996-2017 and analysis on a similar variable was analyzed for fiscal years 2018-2020.

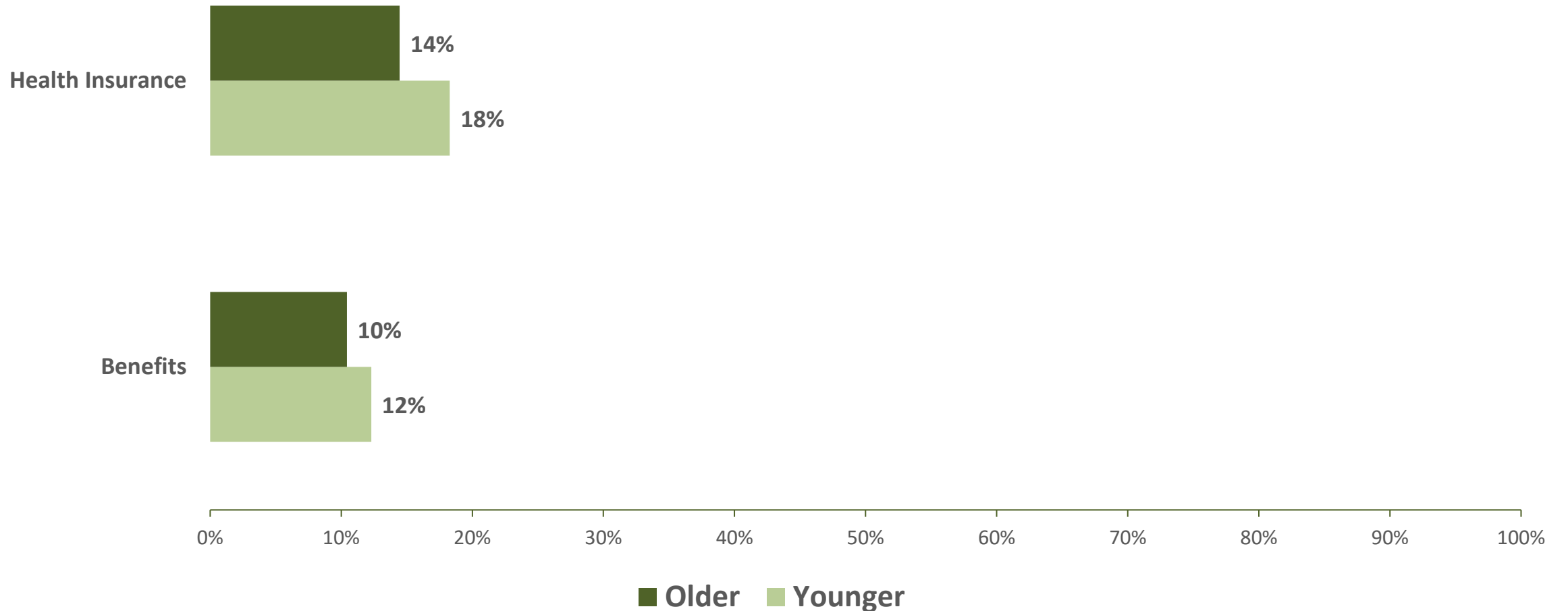
Having Any Digital Device Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



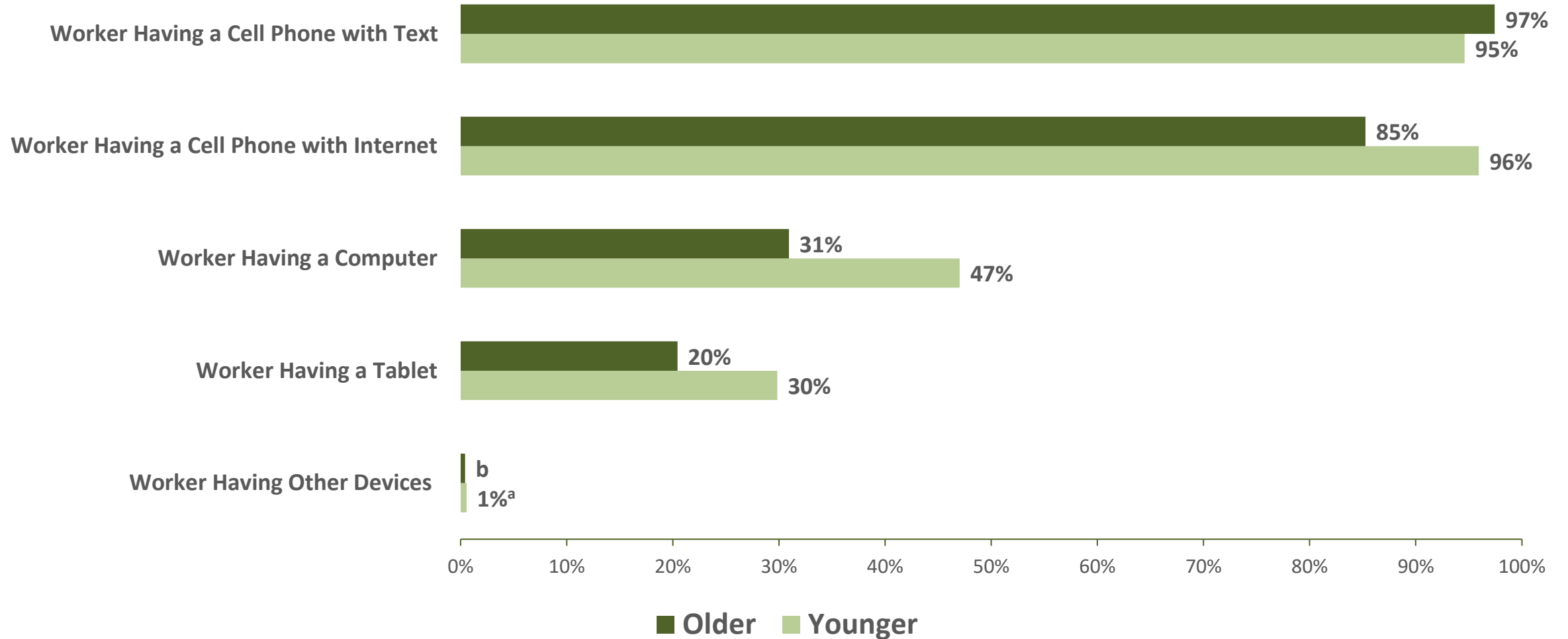
Using Digital Devices to Seek Information Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



Type of Digital Access Among Older vs. Younger Farmworkers

(Source: NAWS 2018-2020)



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Summary

- The farm labor force has aged over the last 20 years as the average age of a domestic crop worker increased from 31 to 41 years. Currently, there are an estimated 500,000 farmworkers age 45 or older working in farm work.
- Older farmworkers averaged 28 years in farm work and 13 with their current employer. Older workers were more likely to be in technical jobs (40%) such as irrigator or tractor driver and less likely to be a harvester.
- Most older farmworkers are Mexican born (74%) and male (73%). Three quarters of older workers lived with family while one in four older workers was single. More than half of older workers had 6 or fewer years of formal education and most were educated in Mexico.
- Older crop workers are more likely to be monolingual Spanish speakers (75%) with three in ten saying they speak English a little (33%) and four in ten saying they are not able to read English (41%). Nine out of ten older farmworkers use a digital device, usually a smart phone. Older workers lagged behind younger farmworkers in access to computers or tablets.
- More than half of the older workforce (56%) reported at least 1 age-related chronic health condition. Six in ten have health insurance (59%) and two-thirds (66%) had a primary health care visit in the past year. Only three in ten older workers had a dental visit in the prior year (28%).

Sources Cited

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<https://doi.org/10.1016/j.neuro.2006.10.006>



The End

For more
information on the
NAWS:

Website

<https://www.doleta.gov/naws/>

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