

# Comparison of behavioural risk factors for farm and non-farm residents in NSW

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## Introduction

### National Preventive Health Agency

This new agency is targeting three specific behavioural risks that impact significantly on health outcomes:

1. Overweight & obesity
2. Smoking
3. Alcohol consumption

While there has been considerable coverage of the poor health status of farming populations, how the behavioural risk factors underpinning these assertions compare to the broader non-farming population, is unclear.

## Aims and methods

- Examine and compare the prevalence of selected behavioural risk factors (Body Mass Index, waist circumference, physical activity, daily smoking and risk alcohol consumption), between farm and non-farm residents in NSW.
- The NSW Population Health Survey samples up to 12,000 NSW residents each year, including approximately 1,500 from each of the eight Area Health Services. The annual telephone survey provides information on self-reported health status, risk factors and health service use.
- Prevalence estimates on specific factors are produced through statistical weighting (i.e. adjusting for selection bias, age, gender, population of Area Health Service etc. in the sample). Detailed methods can be found at [www.health.nsw.gov.au/publichealth/surveys/phs.asp](http://www.health.nsw.gov.au/publichealth/surveys/phs.asp)
- In 2008, a question was added to the survey:  
*Do you live on a farm or rural property?  
 (Estimated Value of Agricultural Output > \$5000 pa)*
- Prevalence estimates for farm residents are compared to that of the non-farm residents responding to this survey using 95% Confidence Intervals.
- Variables were compared for each group for all ages and for 15-29yrs, 30-44yrs, 45-59yrs, 60-74yrs and 75yrs+ age groups.

## Results

### Sample

- There were 1,117 farm and 8,773 non-farm residents responding to the survey. There was no statistical difference in the gender proportions of respondents. However, 54% of farm men were aged 45-74 years compared to 29% of non-farm men.

### Overweight or Obesity

Overweight - Body Mass Index = 26-30  
 Obese - Body Mass Index = > 30 +

- There was no statistical difference for either gender in respect to the prevalence of overweight or obesity for farm and non-farm residents, overall or by age group.

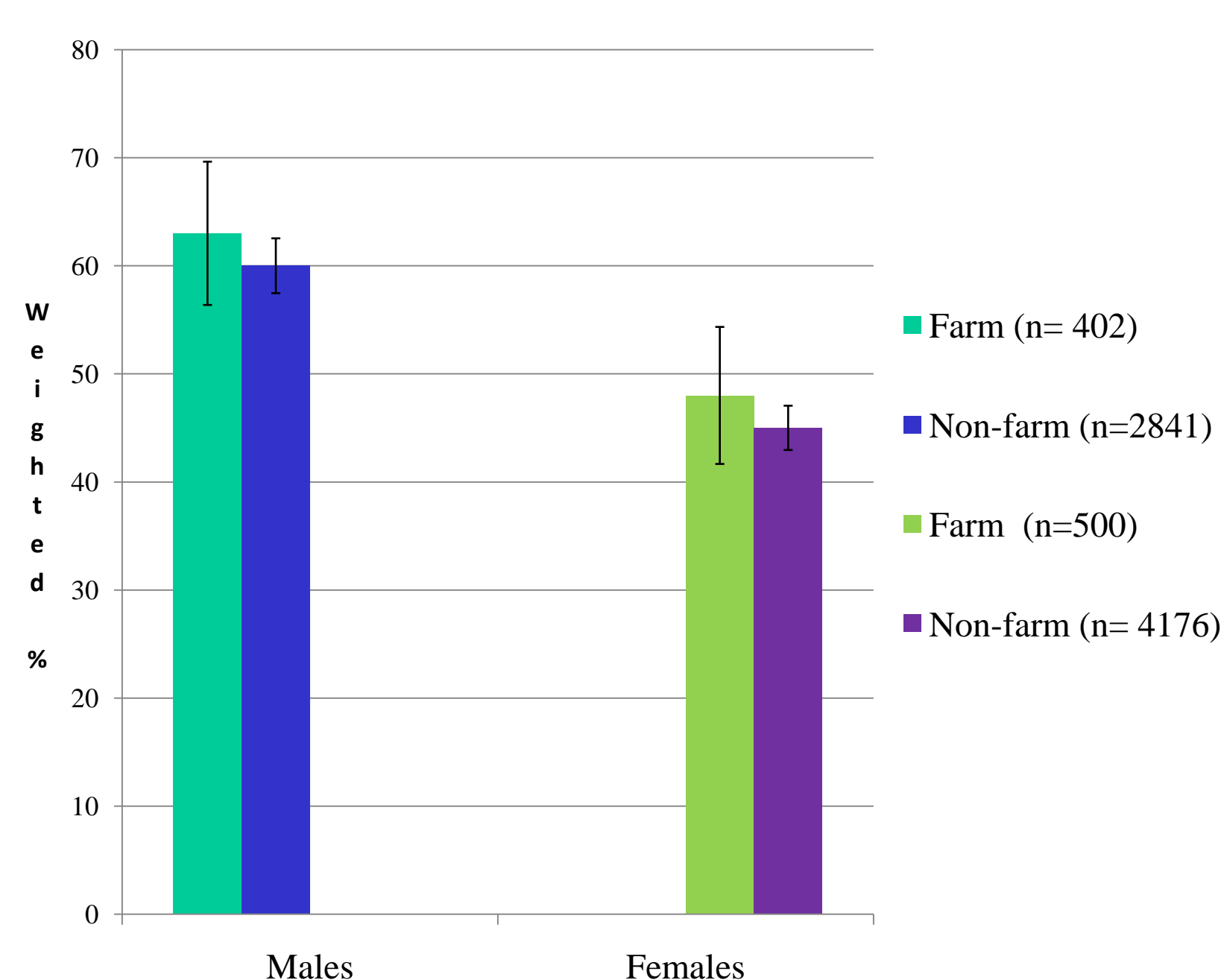


Figure 1. Prevalence of farm and non-farm residents that are overweight or obese (2008)

## Report claims country men face higher risks to health

**Farming not good for health**

*Media headlines suggest farmers are unfit, overweight, smoke and drink too much - but are they really any different to other groups in the Australian population?*

### Waist circumference

- Increased risk was defined as a waist measurement of:  
 > 80cm for women  
 > 94cm for men

- There was no statistical difference for either gender in the mean waist circumference, overall or by age group.

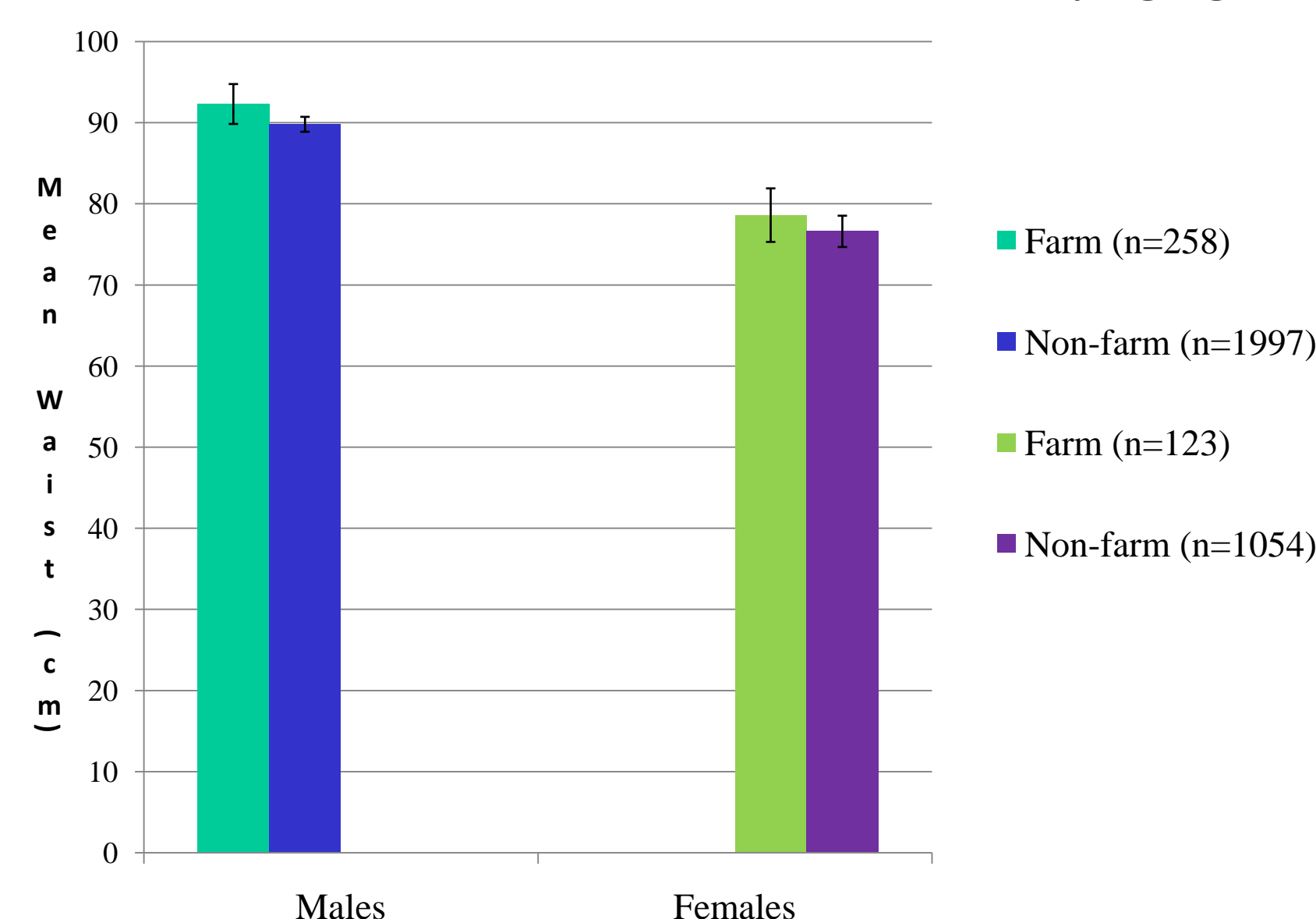


Figure 2. Mean waist circumference of farm and non-farm residents (2008)

### Physical Activity

- Adequate physical activity was a standard calculated as a total of 150 minutes of physical activity per week on five separate occasions, derived from a series of survey questions.
- There was no statistical difference for either gender in respect to the prevalence of adequate physical activity for farm and non-farm residents, overall or by age group.

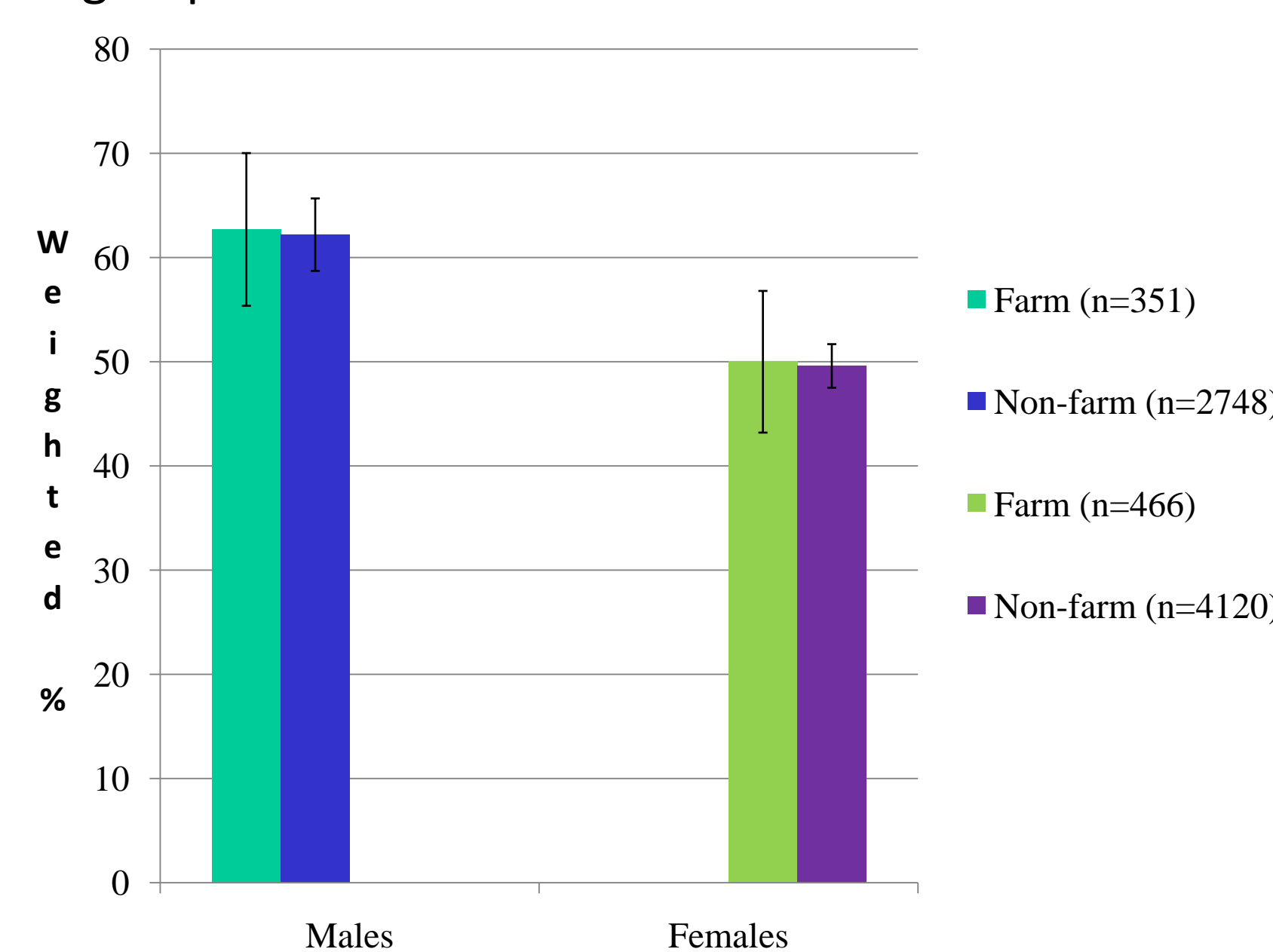


Figure 3. Prevalence of farm and non-farm residents undertaking adequate levels of physical activity (2008)

### Smoking (daily)

- There was no statistical difference for either gender in respect to the prevalence of daily smoking for farm and non-farm residents, overall or by age-group.

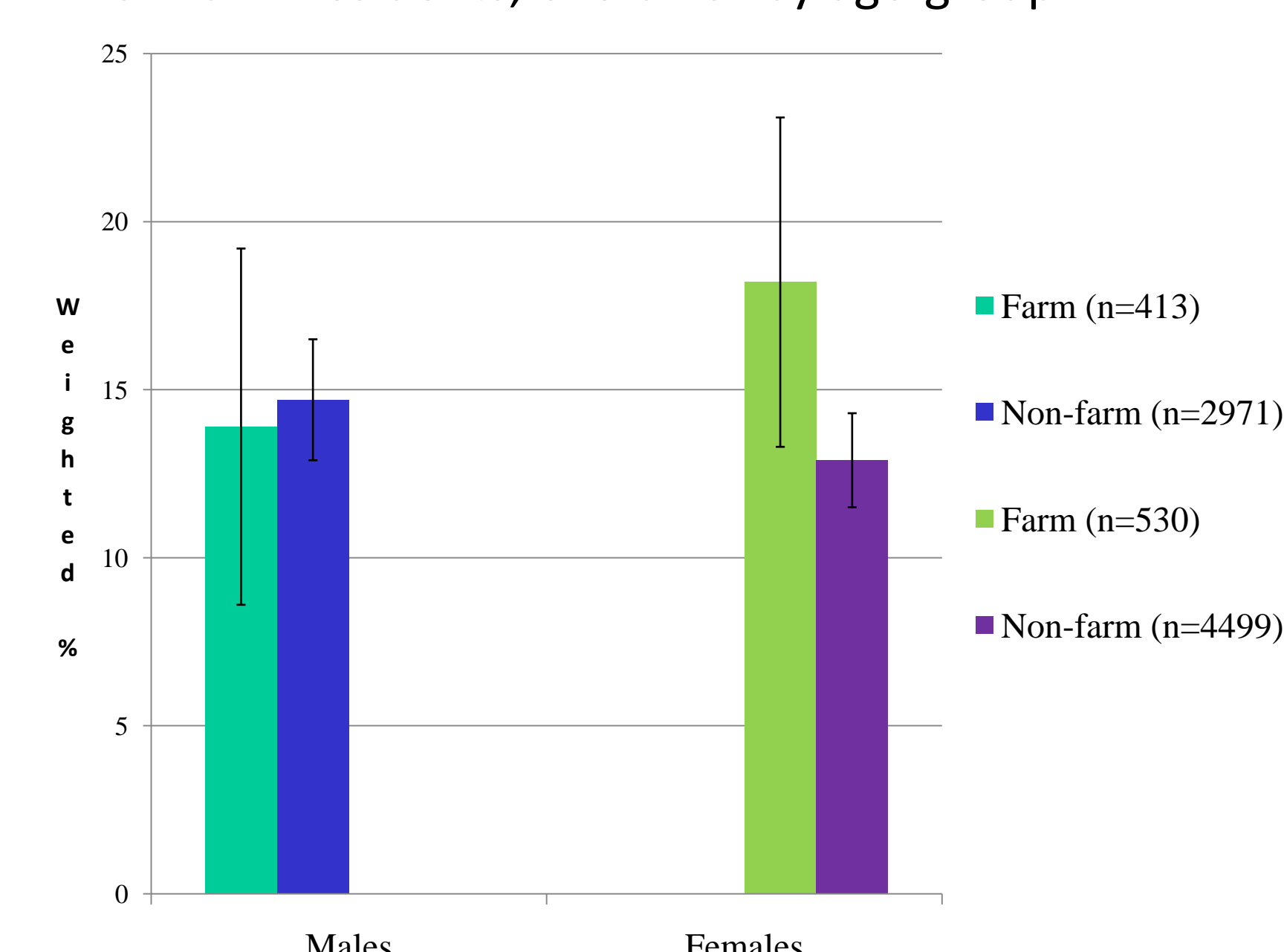


Figure 4. Prevalence of farm and non-farm residents smoking daily (2008)

### Risky alcohol consumption

- Guideline 1 of the 2009 (i.e. drink more than 2 standard drinks on any day) or 2001 (i.e. consumed alcohol every day, consumed on average more than [4 if male/2 if female] standard drinks, consumed more than [6 if male/4 if female] on any 1 occasion or day', NHMRC Australian Alcohol Guidelines
- There was no statistical difference for either gender in respect to the prevalence of risk-alcohol consumption for farm and non-farm residents.

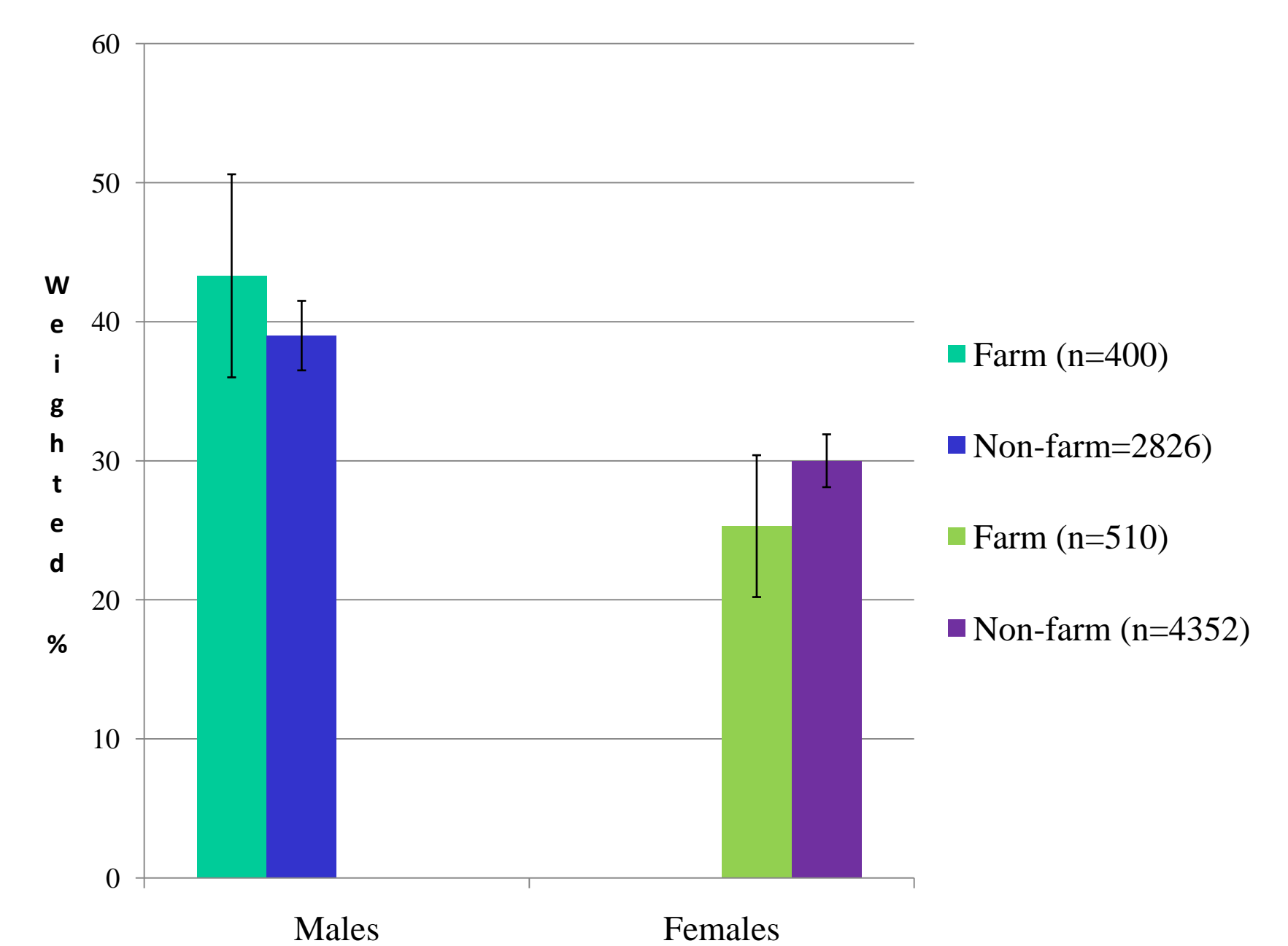


Figure 5. Prevalence of farm and non-farm residents risky alcohol consumption (2008)

## Discussion

There is no statistically significant difference in the prevalence of these behavioural risk factors for farm and non-farm residents in this sample.

The findings have several implications:

- Farm residents have a similar risk profile to non-farm residents for these factors. That is, they reflect the same patterns as the broader population.
- However, as death rates for farmers and farm managers are higher than the general population<sup>1</sup>, this is suggestive of less early detection and later stage disease presentation.
- While there is no difference in the risk profiles, this does not diminish the urgent need to address and reduce the prevalence of these risk factors in farm residents.
- Preventive initiatives for farm residents should be incorporated into population-wide approaches that will be managed by the newly created Medicare Locals. This will increase geographical coverage and potential access, improve early detection and provide a cost-effective approach to address these behavioural risk factors in farm residents.

Reference:

1. Depczynski J, Fragar L. Australian farmers a high risk population for rural health. 7<sup>th</sup> National Farm Health and Safety Conference. 13-15 October, Perth.

## Future Action

- The ACAHS in conjunction with the Rural Industries Research and Development Corporation, is initiating discussion with the Minister for Health & Ageing to ensure health concerns for farmers (and fishermen), are a priority within the scope and operations of the rural Medicare Locals.

## Acknowledgement:

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