

Health Profile of Australian Employees

A study by the University of Wollongong in partnership with
Workplace Health Association Australia (WHAA)

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Report Objectives

- ▶ To examine the health profile of a sample of Australian employees.
- ▶ This report presents the outcomes of the merging and analysis of employee health data from five organisations (members of WHAA) who participated in this project.





The method

- ▶ Data on employee health from five WHAA member organisations
- ▶ Trends in employee health were examined over a 5 to 10 year period
- ▶ Employee health was compared with the most recent Australian population data
 - ▶ Australian Bureau of Statistics
 - ▶ Australian Institute of Health and Welfare.



Key Findings: A snapshot

- ▶ About 1 in 10 (12.0%) workers had high blood pressure;
- ▶ Nearly a quarter (23.8%) had high cholesterol
- ▶ More than half were overweight or obese (40.3% and 20.2%, respectively)
- ▶ Abdominally overweight or obese was higher in males (46.1%) than females (37.0%)
- ▶ Around 11% were daily smokers or consumed alcohol at a risky level
- ▶ Approximately half were physically inactive
- ▶ 65.1% of employees reported moderate to high stress levels, and 41% had psychological distress levels considered to be at-risk

Key Findings: Trends

▶ Improvements

- ▶ Blood pressure
- ▶ Abdominally overweight or obese
- ▶ Daily smoking

▶ Deterioration

- ▶ Body Mass index, which increased to slightly above the national rate (64.1% compared to 63.2%)
- ▶ Physically inactive workers peaked at 60%, above the national rate of 56%
- ▶ Psychological distress (30% to 40.1% prevalence), however remained consistently above the national rate (29.9%)
- ▶ Moderate to very high stress levels from 2004 to 2014 (between 60 and 70%)

Key Findings: Gender & Age

▶ Gender

- ▶ Males had greater rates of high blood pressure/hypertension, BMI, waist circumference, and alcohol risk
- ▶ Females were at greater risk of high psychological distress

▶ Age

- ▶ Three in four people aged between 25 & 64 years had moderate to high levels of stress
- ▶ BMI, blood pressure/hypertension and cholesterol all increased with age
- ▶ Younger groups were more likely to be current smokers, and those aged between 45 and 54 years most at risk of drinking alcohol at risky levels.

Recommendations

- ▶ Core items for future data collection
- ▶ A data integration process be implemented
- ▶ Information on employee absenteeism, demographic variables and other work-related information is recorded
- ▶ Intervention data is included in data set
- ▶ Data are coded to allow matching over time
- ▶ Regular analysis of data to reduce complexity of task compared to more occasional analysis
- ▶ Periodical reports on findings are made to the WHAA board and to member organisations

Conclusion

The results of this project indicate some positive trends in health outcomes over the 10-year period. These changes may be attributable to HRAs and other workplace health strategies; however, more research is needed to confirm this conclusion. Some health outcomes – most notably physical activity and mental health – were less positive. Poor mental health, for example, was reported by 40% to 60% of employees. This suggests that organisations need to continue efforts to create mentally healthy workplaces.

Main Results

More detailed results are now presented for the following:

1. Sample characteristics and a snapshot of employee health
2. Trends in health (2004 – 2014)
3. Differences by age and gender
4. Differences across interventions and health checks
5. Differences by organisation



The sample & a snapshot of employee health

2013

Part 1. Sample characteristics

	2010	2011	2012	2013	2014
N*	5571	7363	6466	6903	2440
Age, mean (SD)	41.0 (11.4) years	40.9 (11.3) years	41.4 (11.3) years	43.1 (11.1) years	41.3 (11.6) years
Gender					
Male	3199 (57.2%)	4207 (57.1%)	3076 (47.6%)	3546 (51.4%)	1281 (52.5%)
Female	2372 (42.6%)	3156 (42.9%)	3390 (52.4%)	3357 (48.6%)	1159 (47.5%)
State					
NSW	95 (15.3%)	110 (8.5%)	77 (5.5%)	65 (11.5%)	36 (13.7%)
ACT	431 (69.4%)	1005 (78.0%)	934 (67.1%)	445 (79.0%)	167 (63.7%)
Tas	7 (1.1%)	67 (5.2%)	229 (16.5%)	1 (.2%)	7 (2.7%)
QLD	39 (6.3%)	26 (2.0%)	20 (1.4%)	17 (3.0%)	21 (8.0%)
WA	41 (6.6%)	37 (2.9%)	51 (3.7%)	18 (3.2%)	31 (11.8%)
NT	6 (1.0%)	38 (3.0%)	76 (5.5%)	2 (.4%)	0
Overseas	2 (.3%)	5 (.4%)	5 (.4%)	15 (2.7%)	0

Part 1. A snapshot of employee health

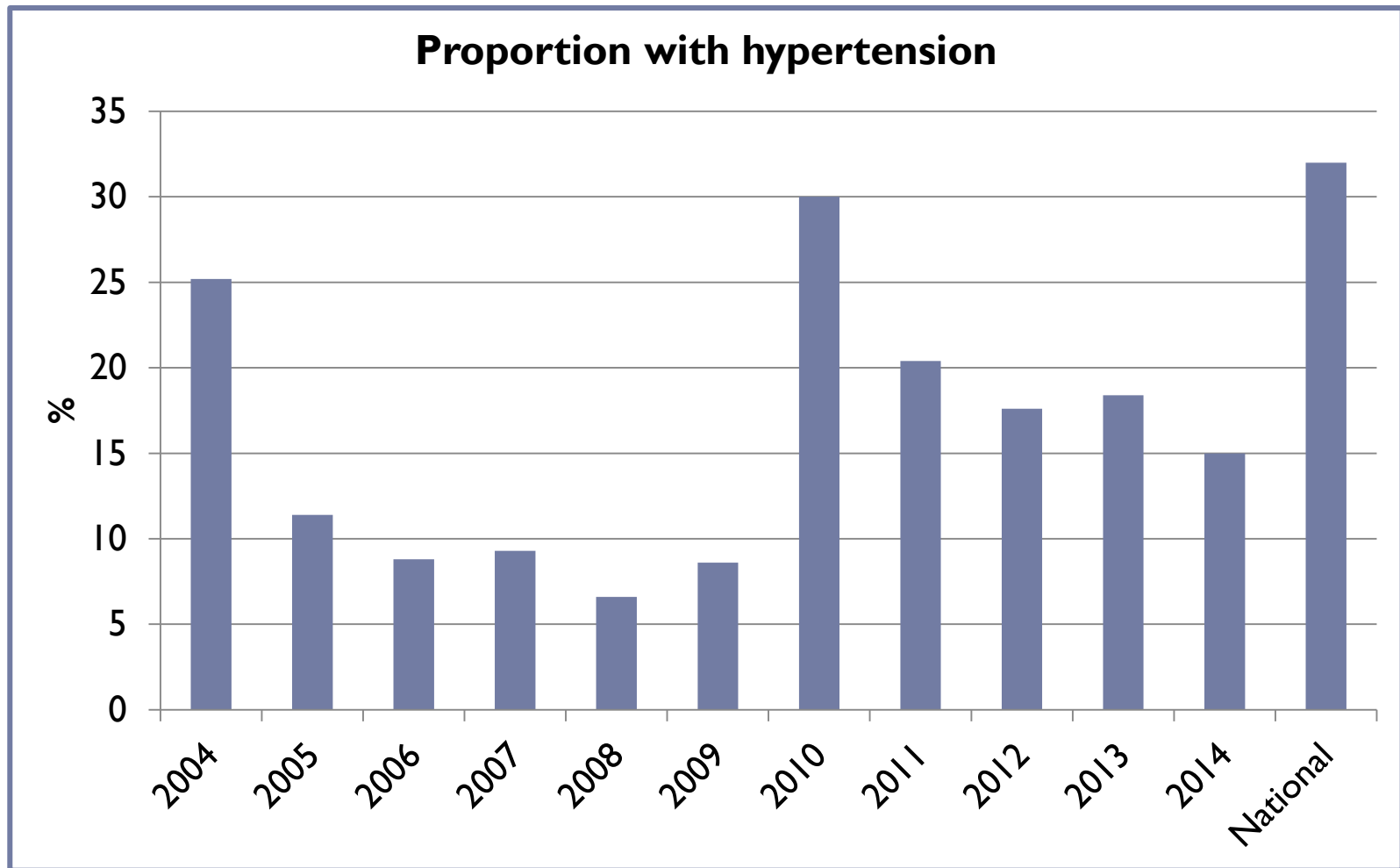
- ▶ 2013 - 6903 persons
- ▶ 80% aged 25 to 54 years
- ▶ **Biometric outcomes:**
 - ▶ About 12% high blood pressure
 - ▶ 1 in 5 high cholesterol
 - ▶ Over 60% overweight or obese
- ▶ **Behavioural Risk factors**
 - ▶ About 11% daily smokers or at-risk drinkers
 - ▶ Nearly half physically inactive
- ▶ **Mental health**
 - ▶ 65.1% moderate to high stress levels
 - ▶ 41.1% at-risk levels of distress



Trends in Health Outcomes

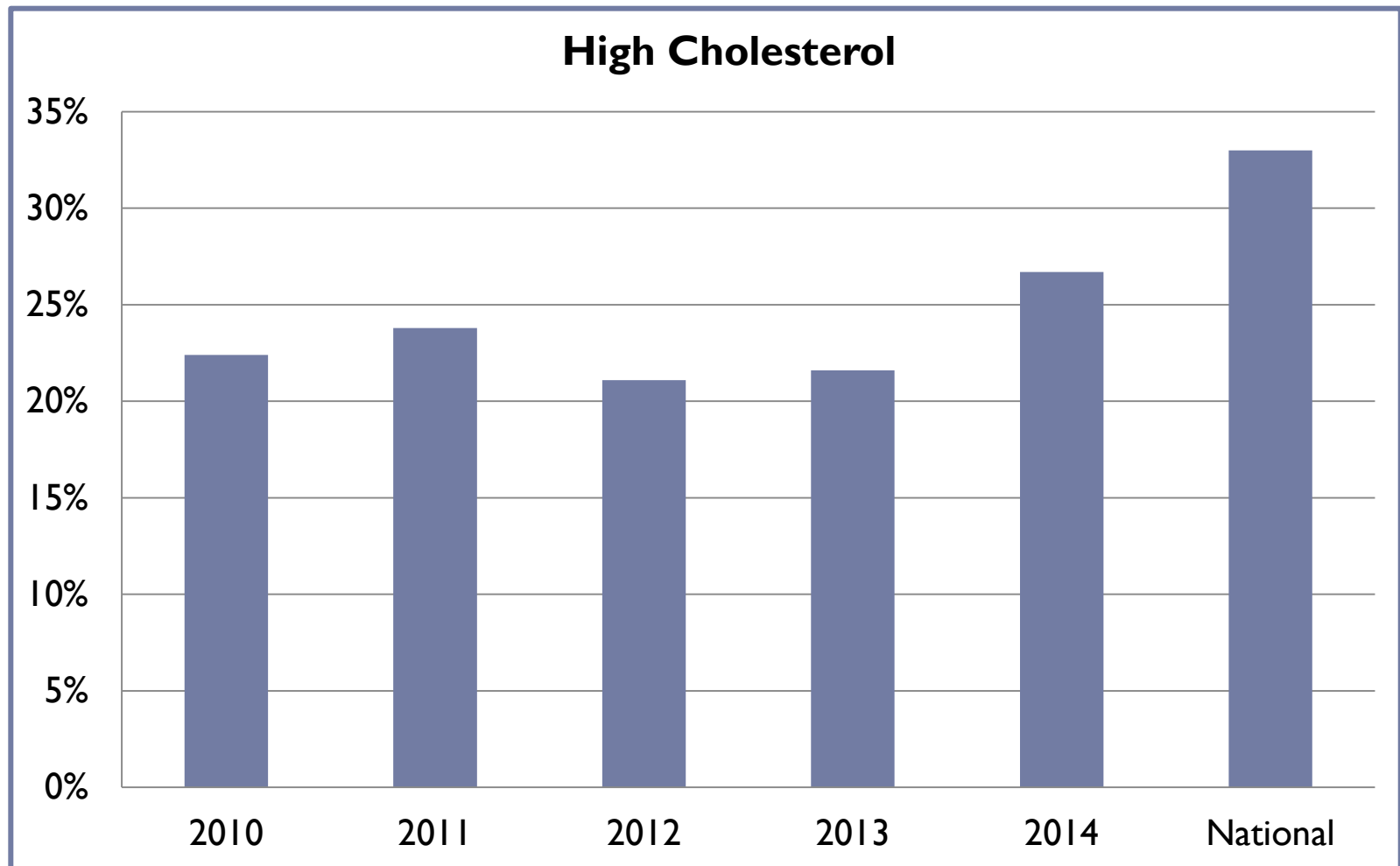
2004 - 2014

Biometric Health Outcomes: High blood pressure/hypertension



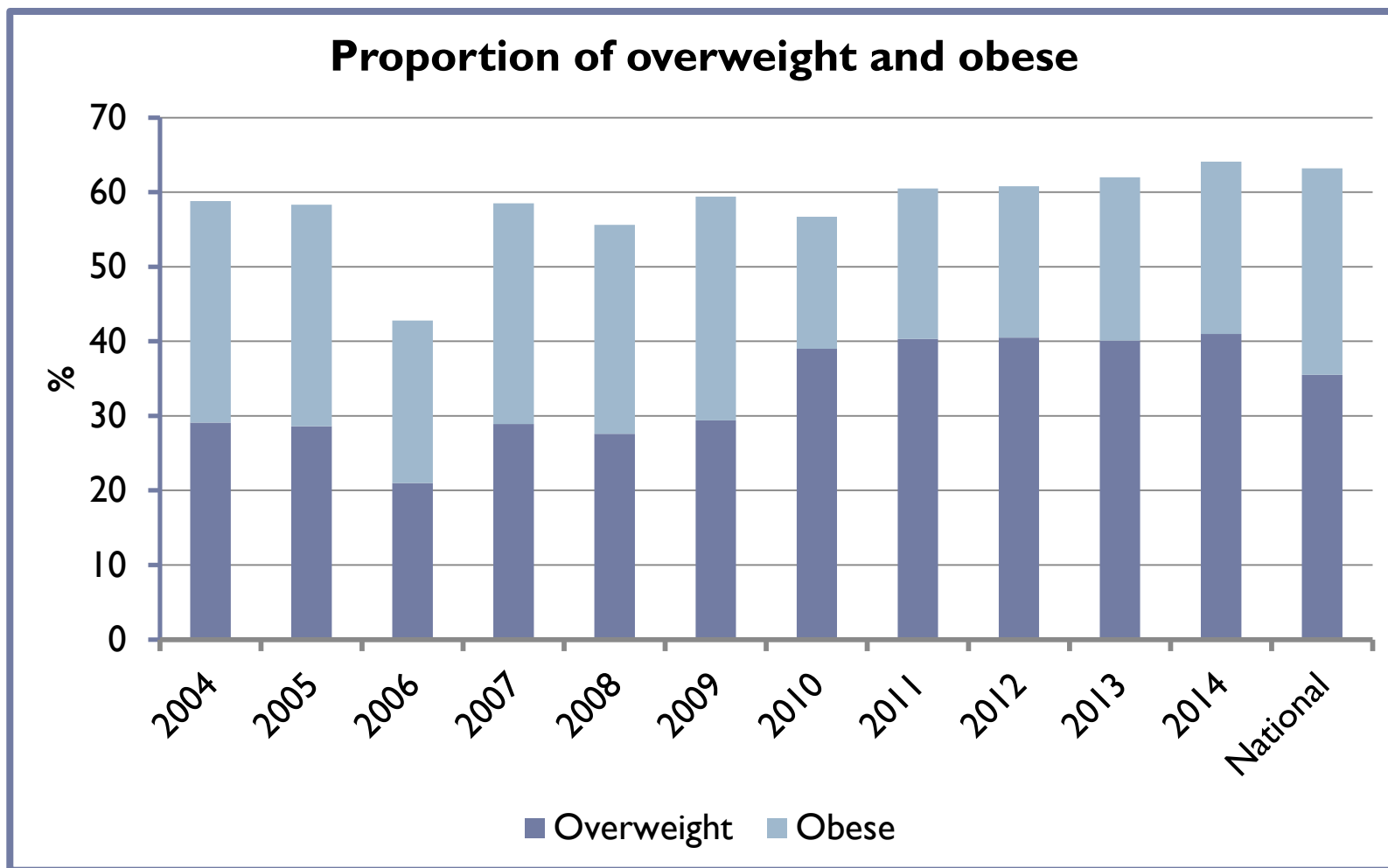


Biometric Health Outcomes: Cholesterol



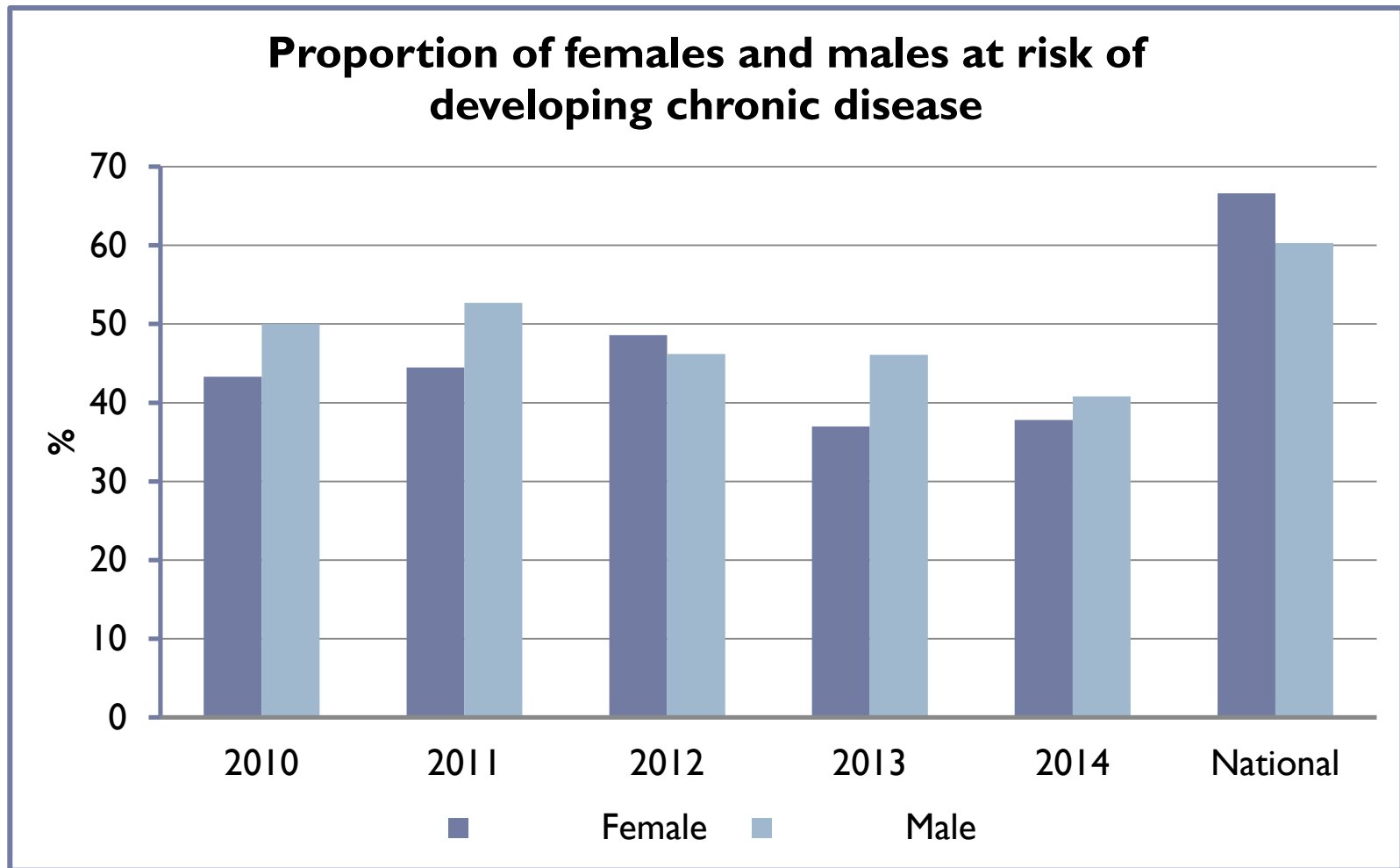
Biometric Health Outcomes: Body Composition

▶ (I) Body Mass Index (BMI)



Biometric Health Outcomes: Body Composition

▶ (2) Waist circumference



Summary of biometric trends

High blood pressure prevalence fluctuated during the 10-year period, however overall rates declined . Levels remained below national figures.

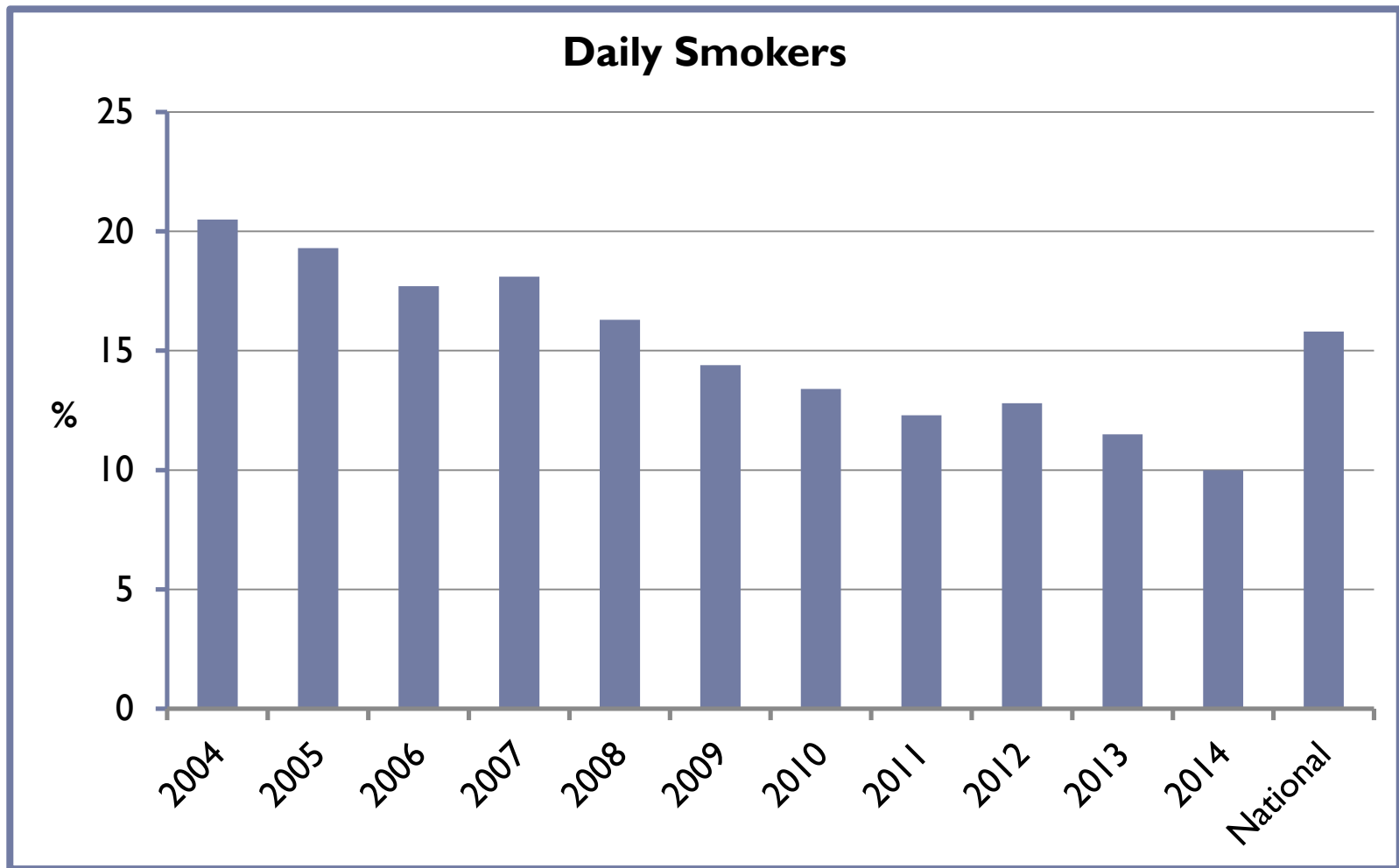
High total cholesterol showed an overall increase to the year 2014, however remaining below national levels.

The proportion of overweight and obese people increased slightly between 2004 (58.8%) and 2014 (64.1%), and is remained above the national average (63.2%).

Overall trends for abdominally overweight and obese males and females suggest a slight increase, and remained below national rates.

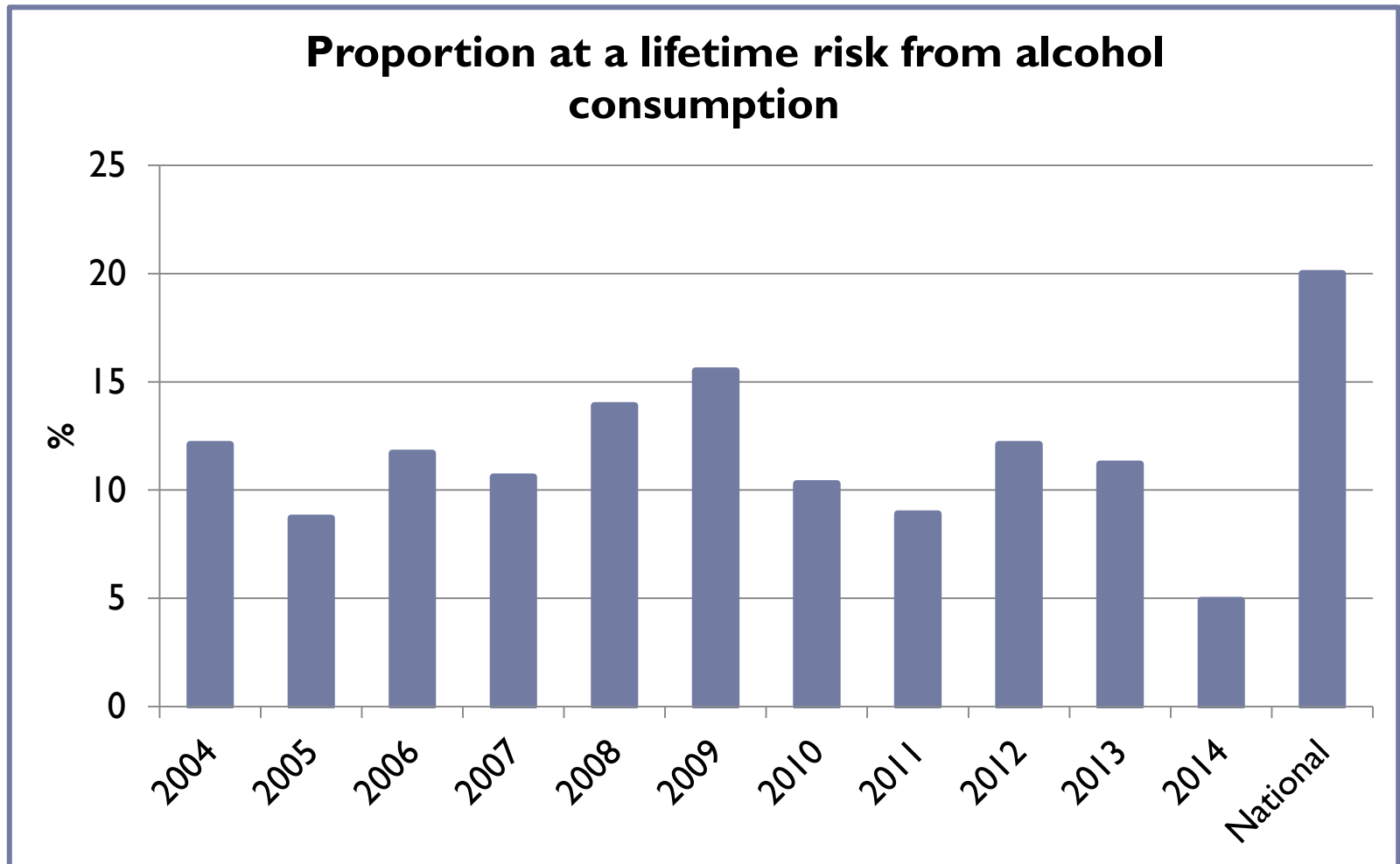


Behavioural Risk Factors: Smoking

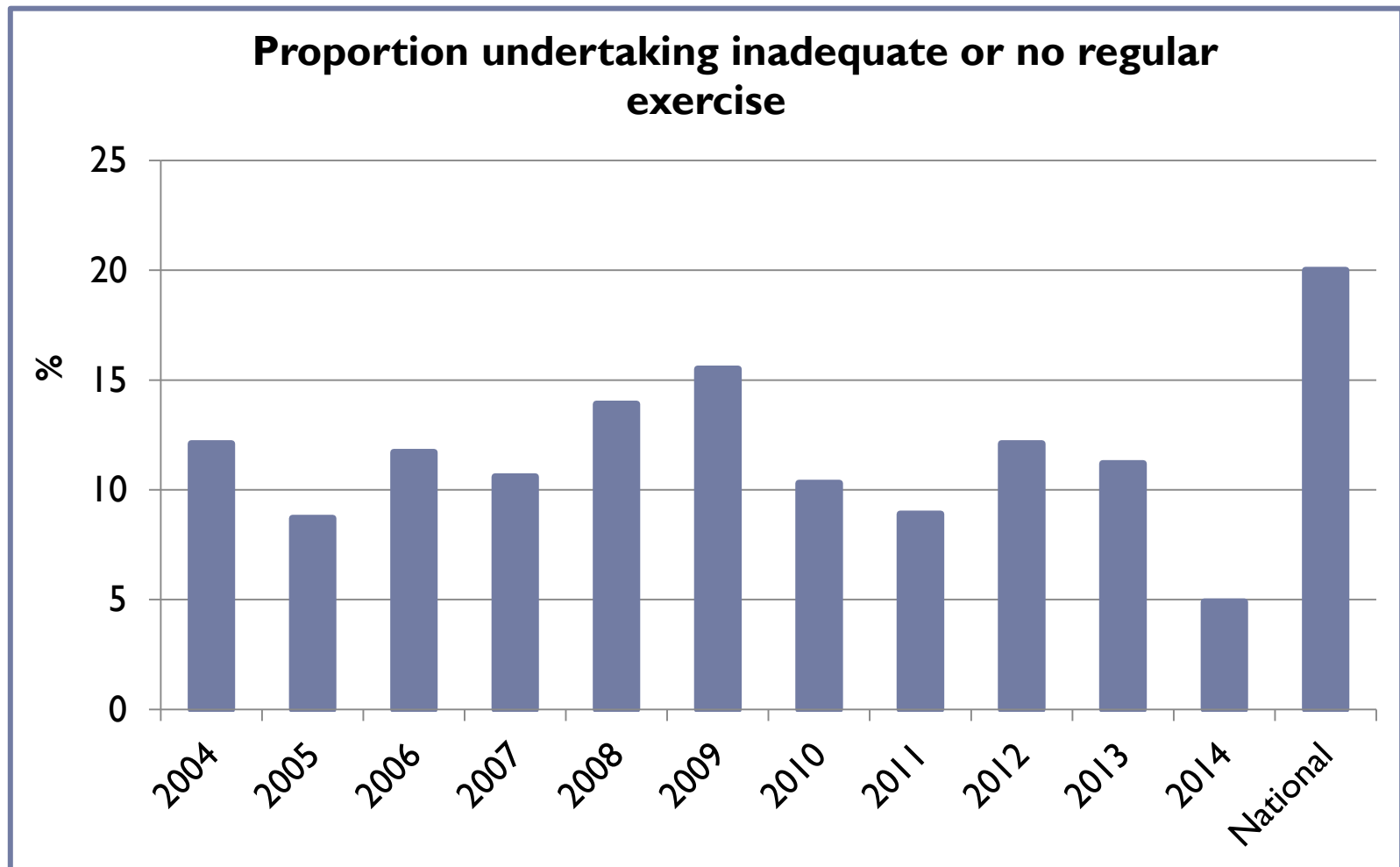




Behavioural Risk Factors: Alcohol consumption



Behavioural Risk Factors: Physical activity



Summary of lifestyle factors

The prevalence of smoking decreased over the ten-year period and remained below the national average

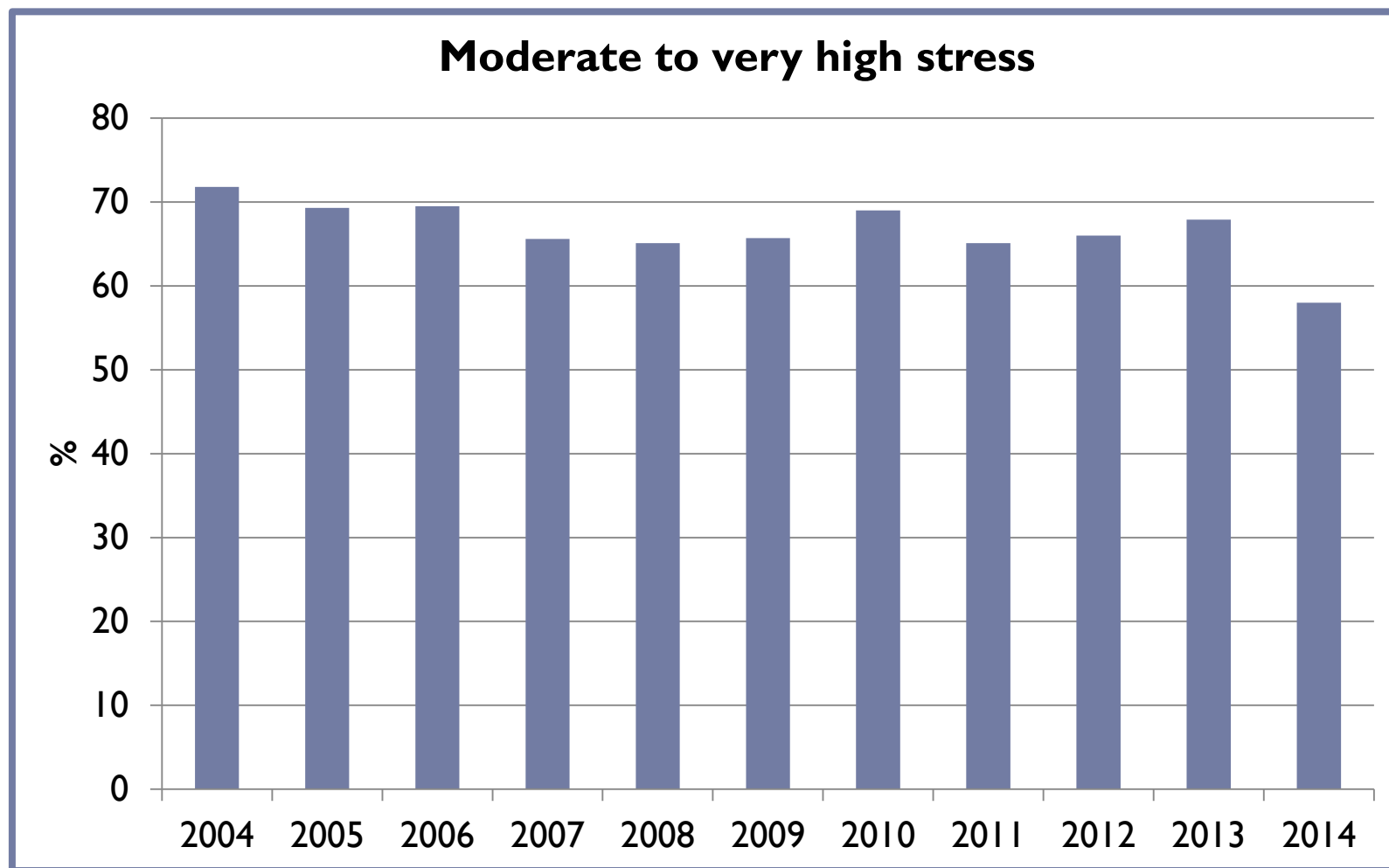
A lower proportion of individuals were classified as drinking at a lifetime risk level in 2014 than in 2004, although rates did rise between 2008-09.

Physical inactivity rates fluctuated, peaking in 2012.

Rates in most years were around the national prevalence and 2014 recorded the lowest rate.

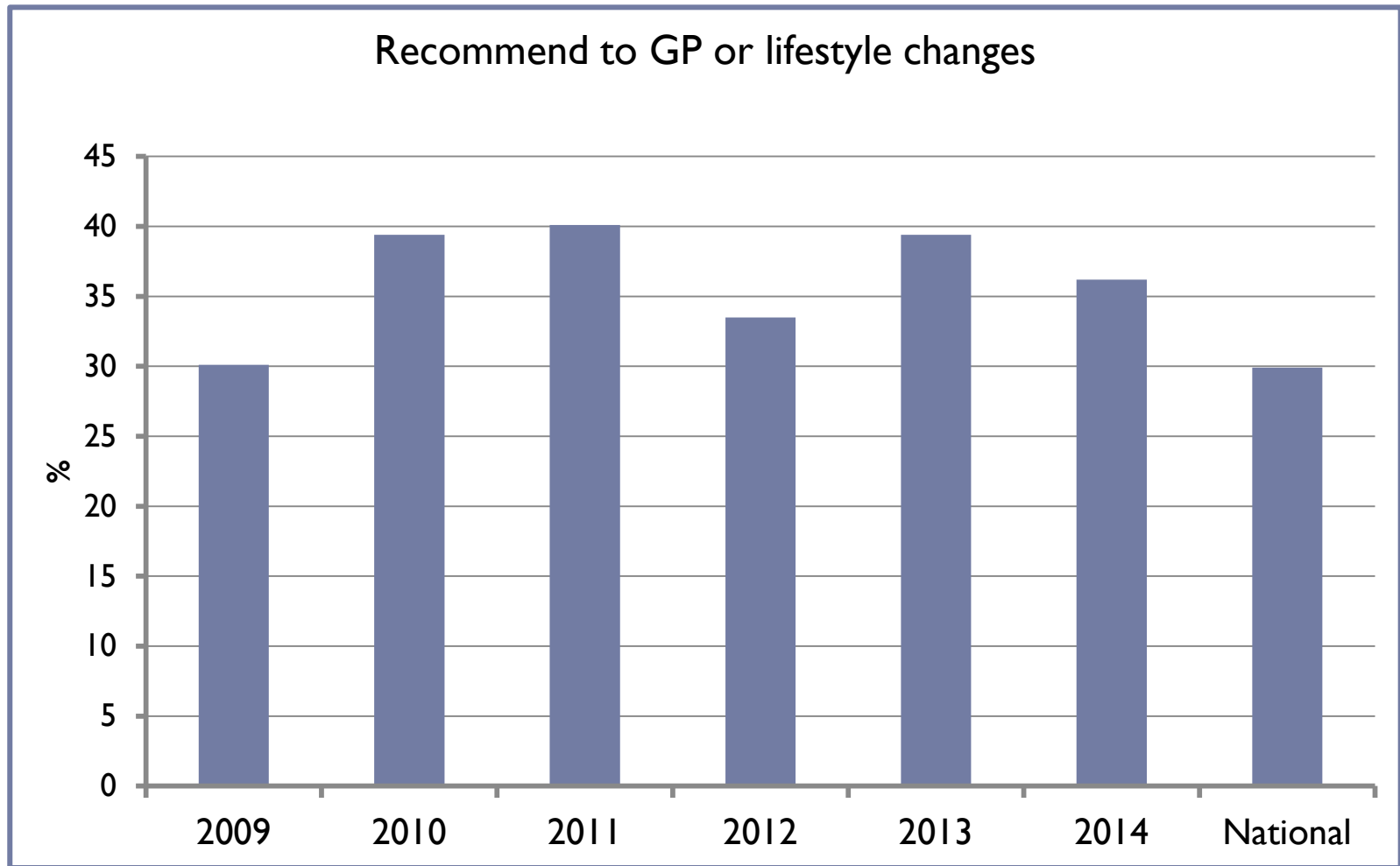


Mental health: Stress



Mental health: Psychological distress

(Data on psychological distress prior to 2009 were not available)



Summary of mental health factors

Overall, moderate to very high stress levels ranged from 58% to 71%.

Moderate to high psychological distress fluctuated slightly across the time period, however remained above national rates.

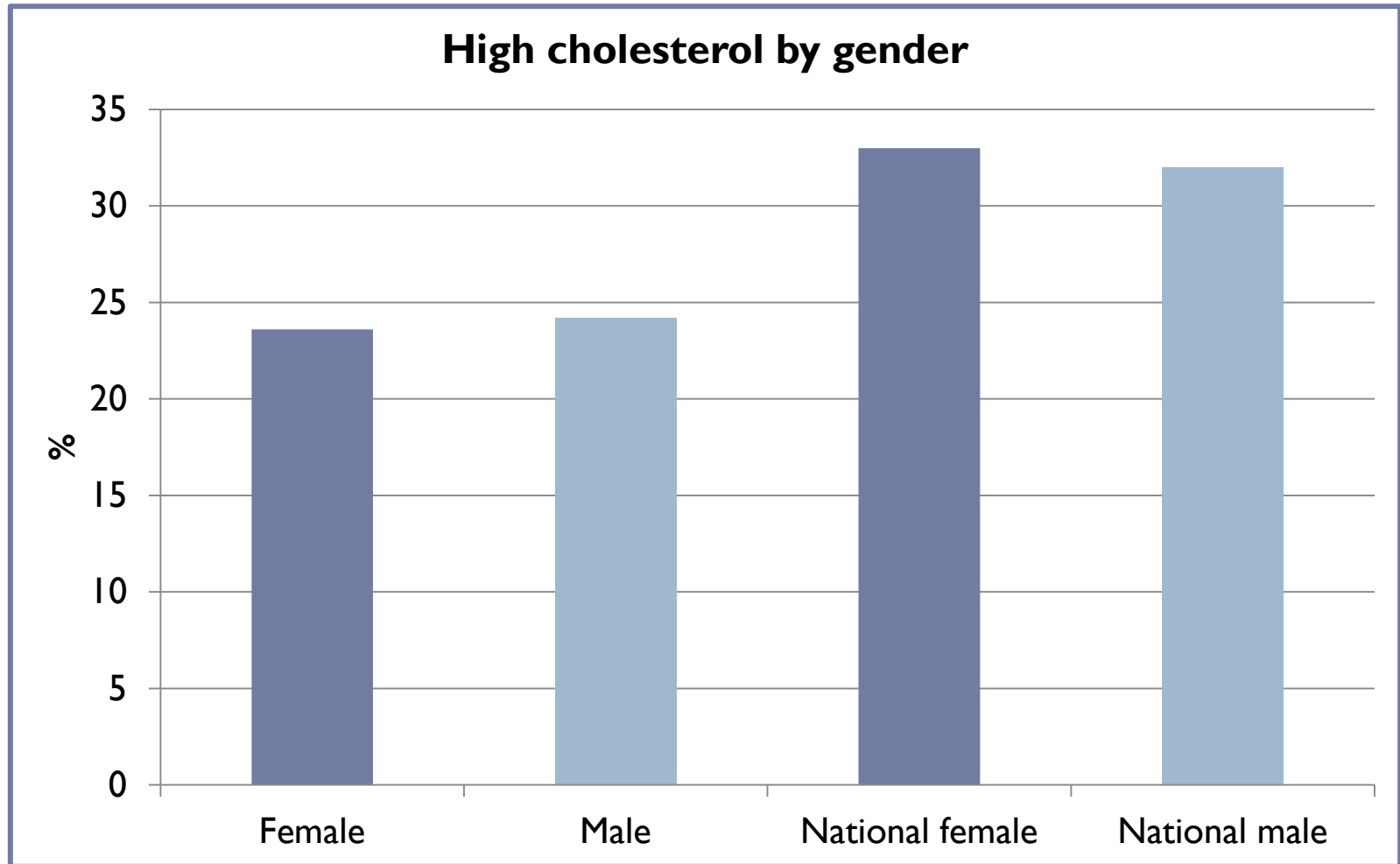




Differences in Health by Gender

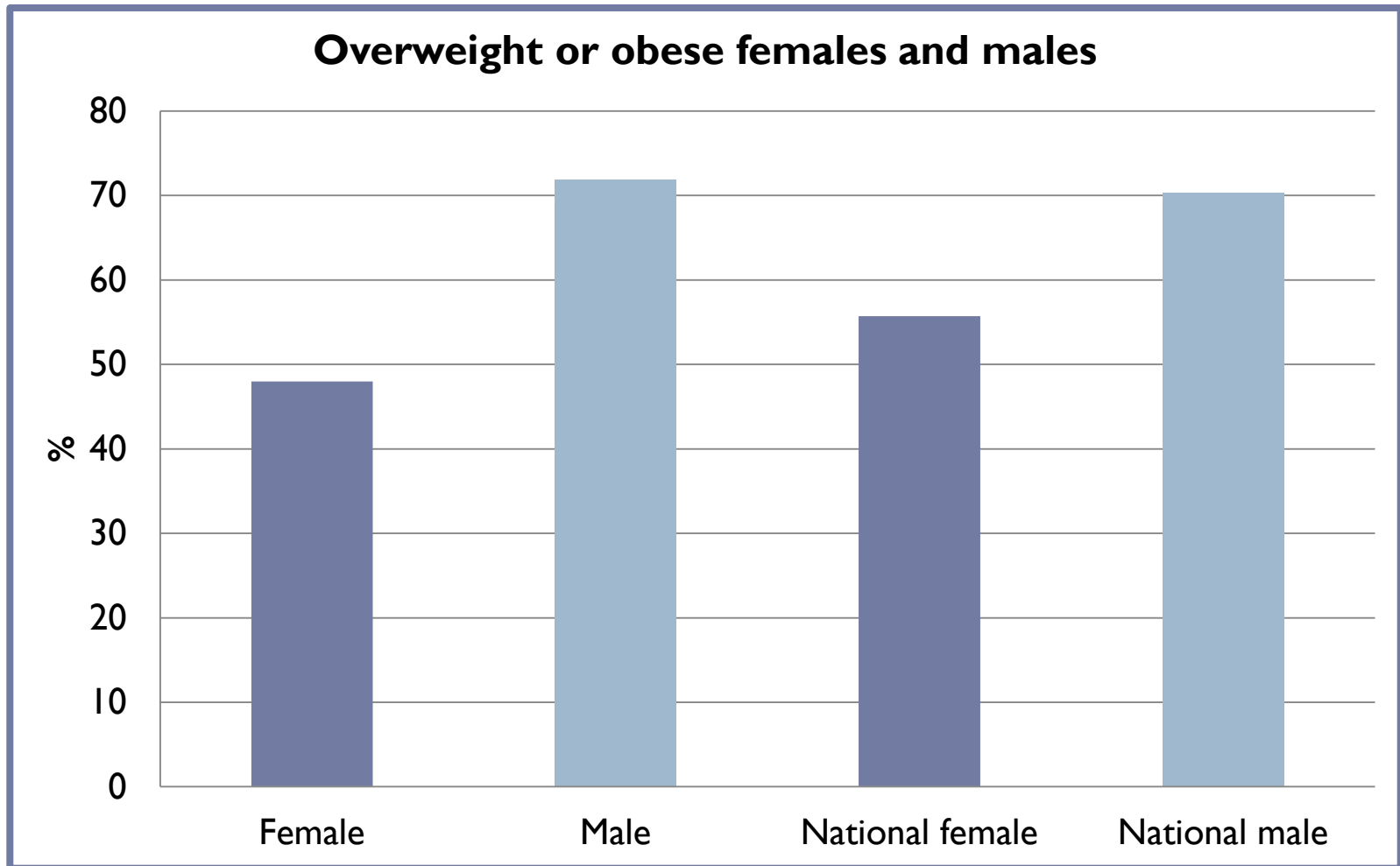


Biometric Health Outcomes & Gender: Cholesterol

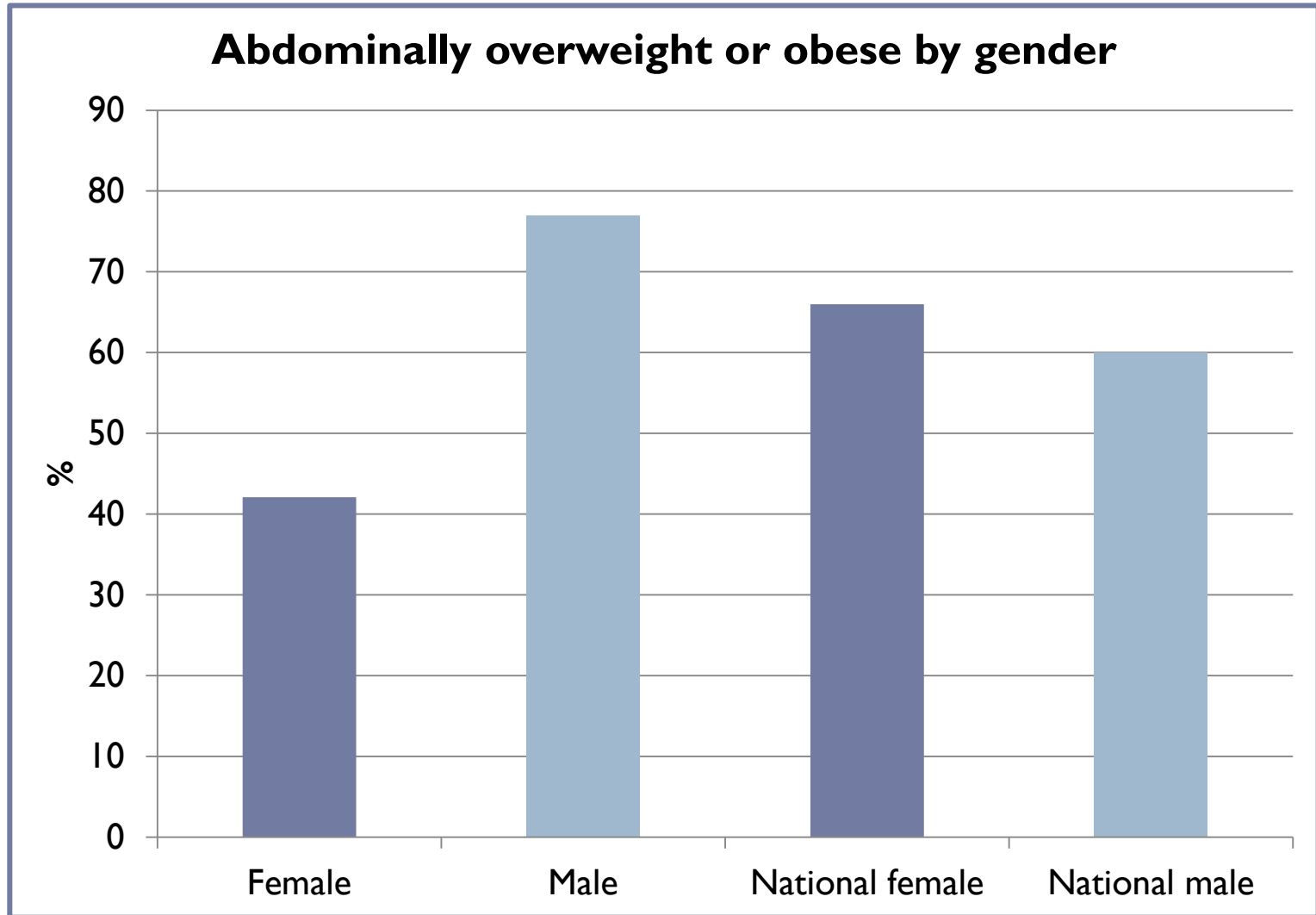




Biometric Health Outcomes & Gender: Body Composition - Body Mass Index (BMI)

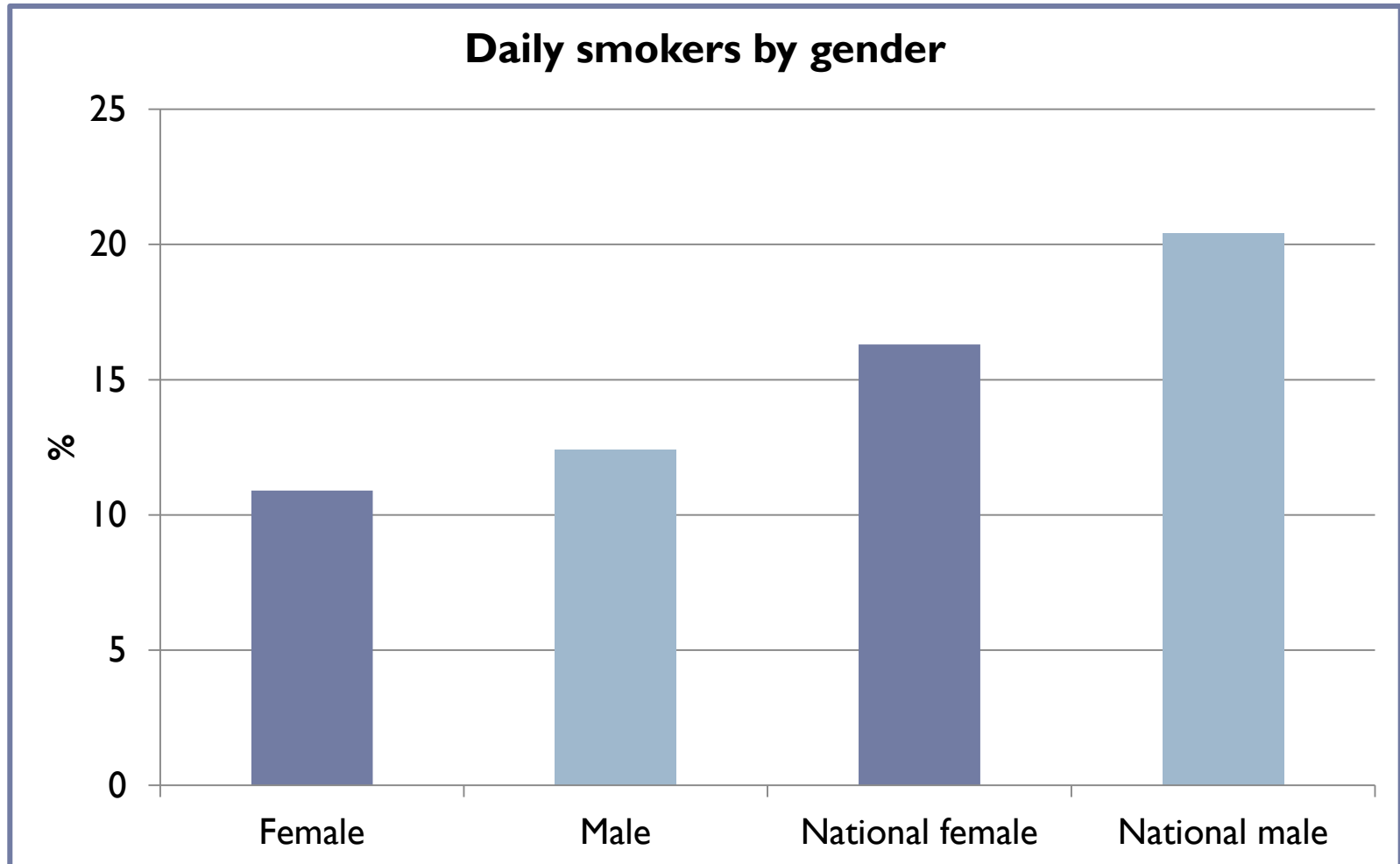


Biometric Health Outcomes & Gender: Body Composition - Waist circumference

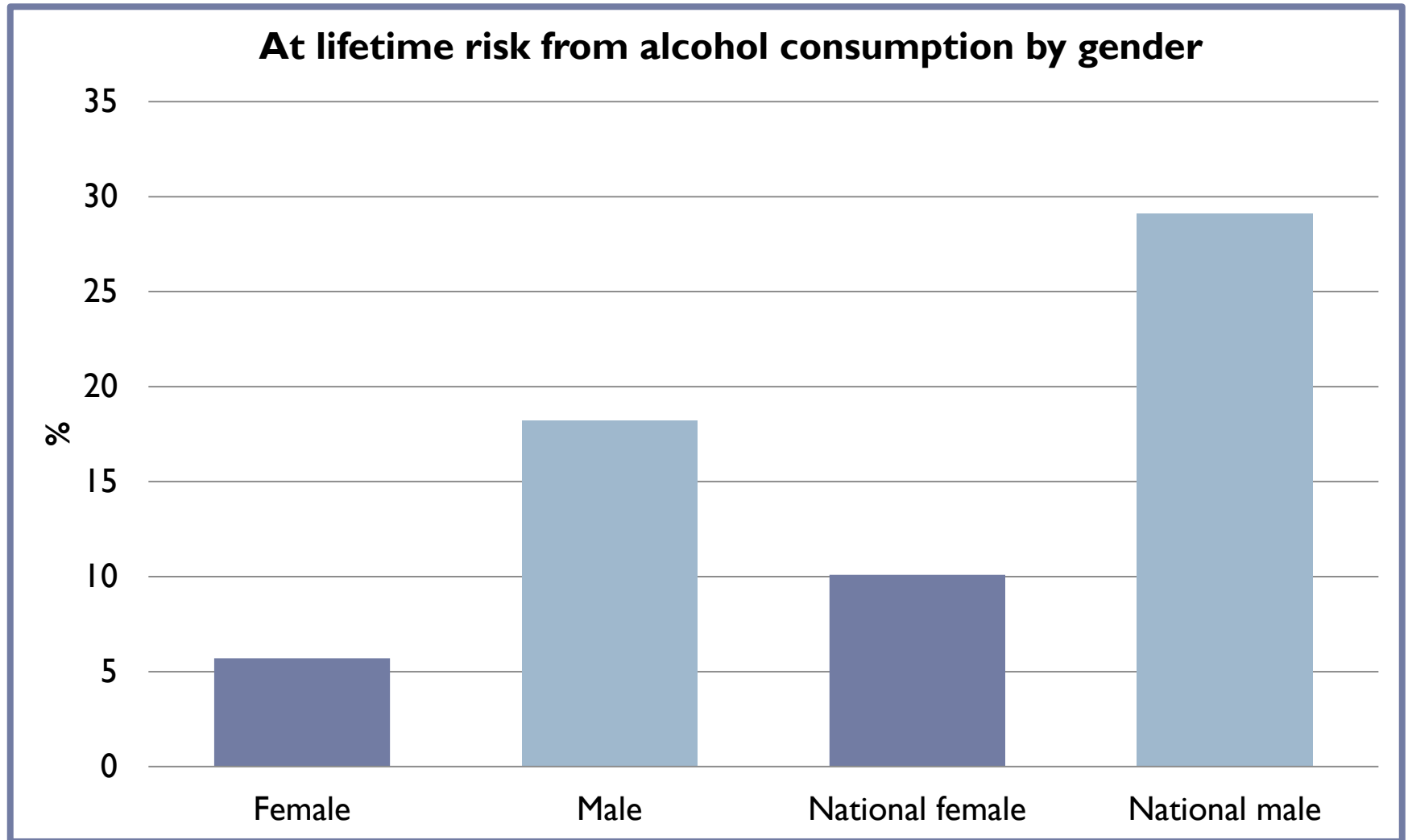




Behavioural Risk Factors: Smoking & Gender

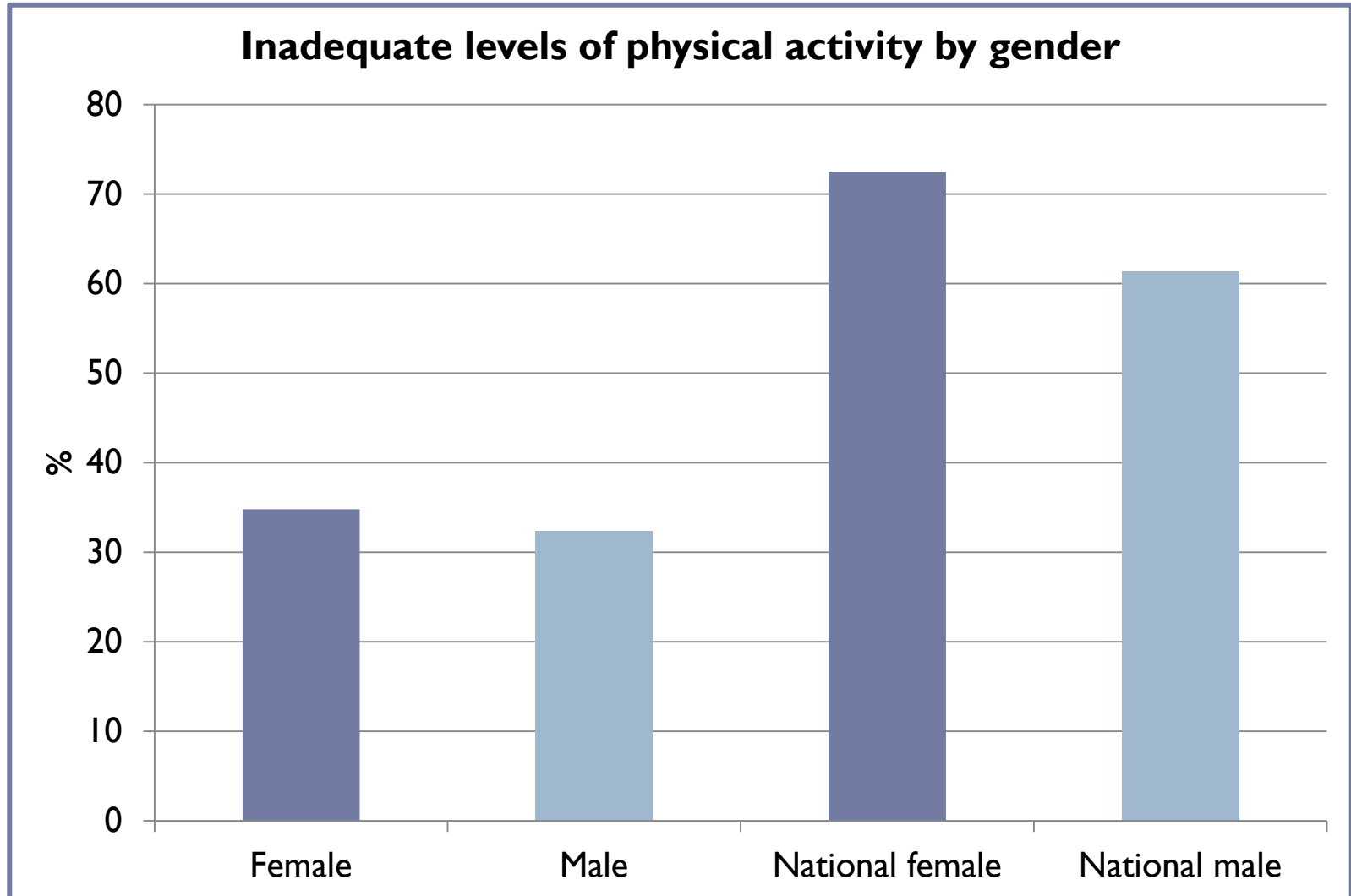


Behavioural Risk Factors: Alcohol & Gender



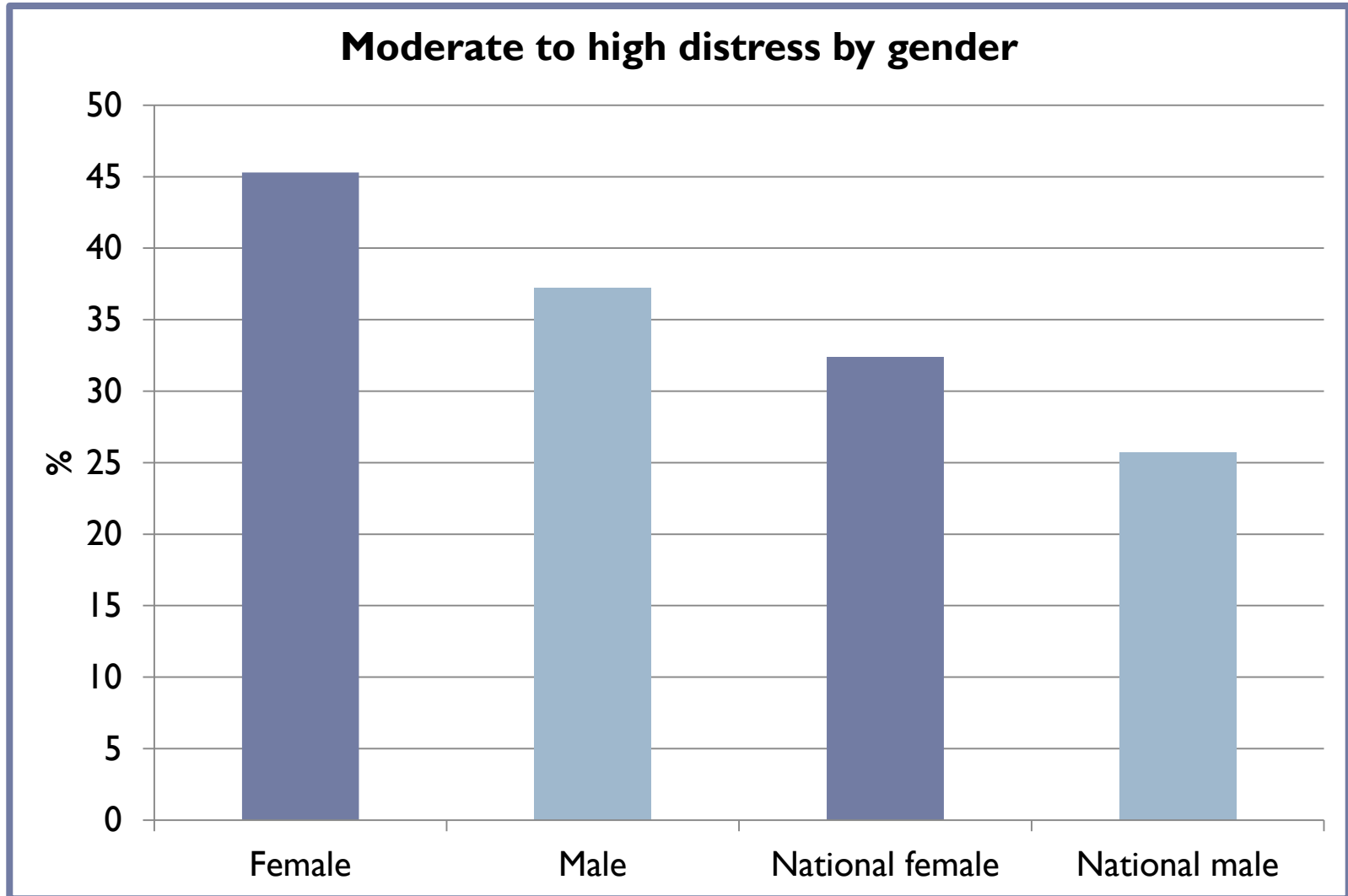


Behavioural Risk Factors: Physical Activity & Gender





Mental Health: Psychological Distress & Gender





Mental health: Stress by gender

- ▶ More than half of both females and males reported moderate or high stress levels, with levels being similar between genders.
- ▶ High stress was reported by 17.4% females and 18.7% males. Moderate stress levels were reported by 52.9% females and 47.2% males.
- ▶ Nationally, 74% of working women report that stress is having at least some impact on mental health



Summary of gender differences

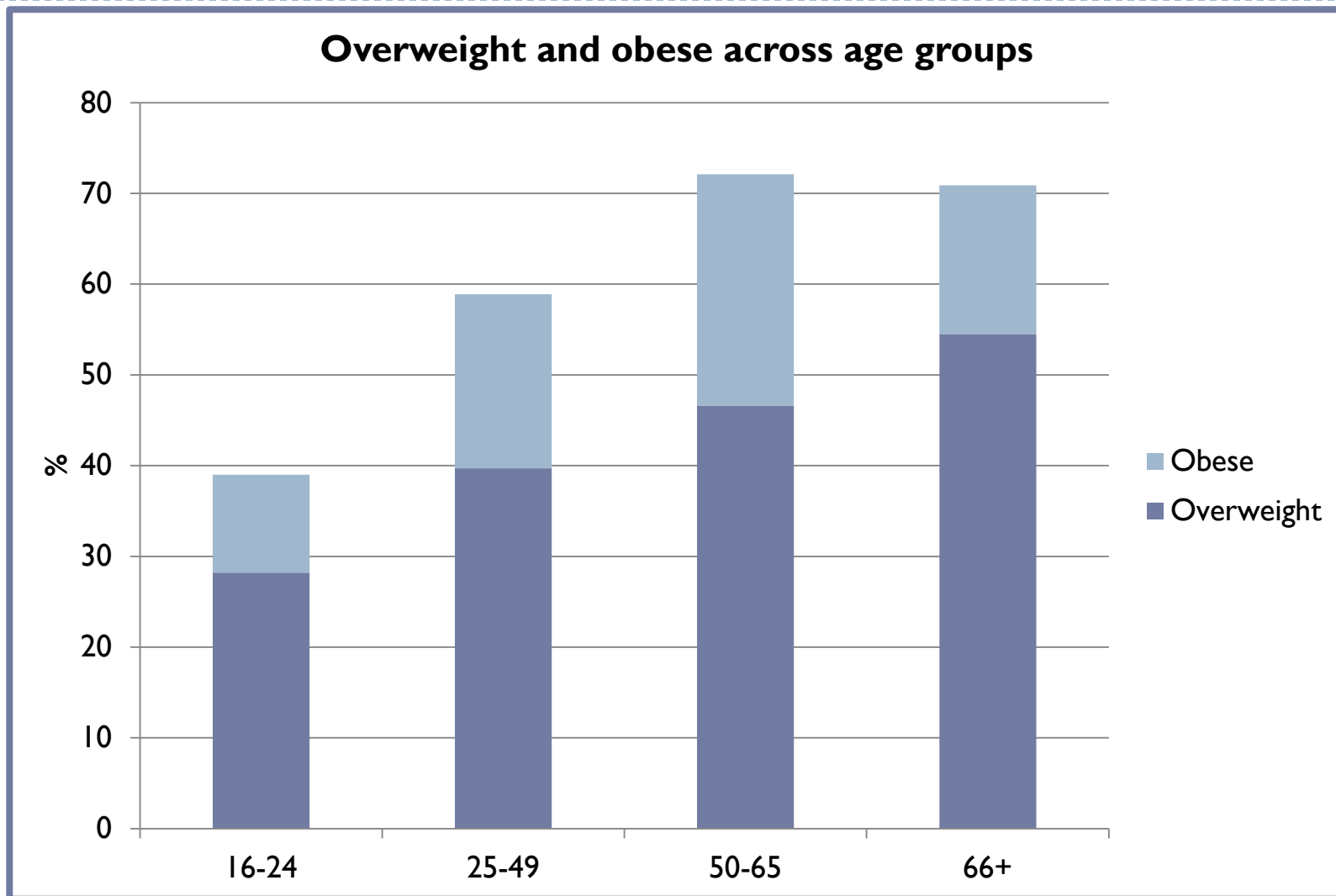
- Across the biometric indicators, cholesterol, blood pressure, males were more likely than females to be considered at-risk.
- There were no differences between gender for risk factors such as smoking and physical activity. However a greater proportion of males than females exceed alcohol guidelines.
- Females showed higher psychological distress levels than males however stress levels were similar between genders.



Differences in Health Across Age Groups

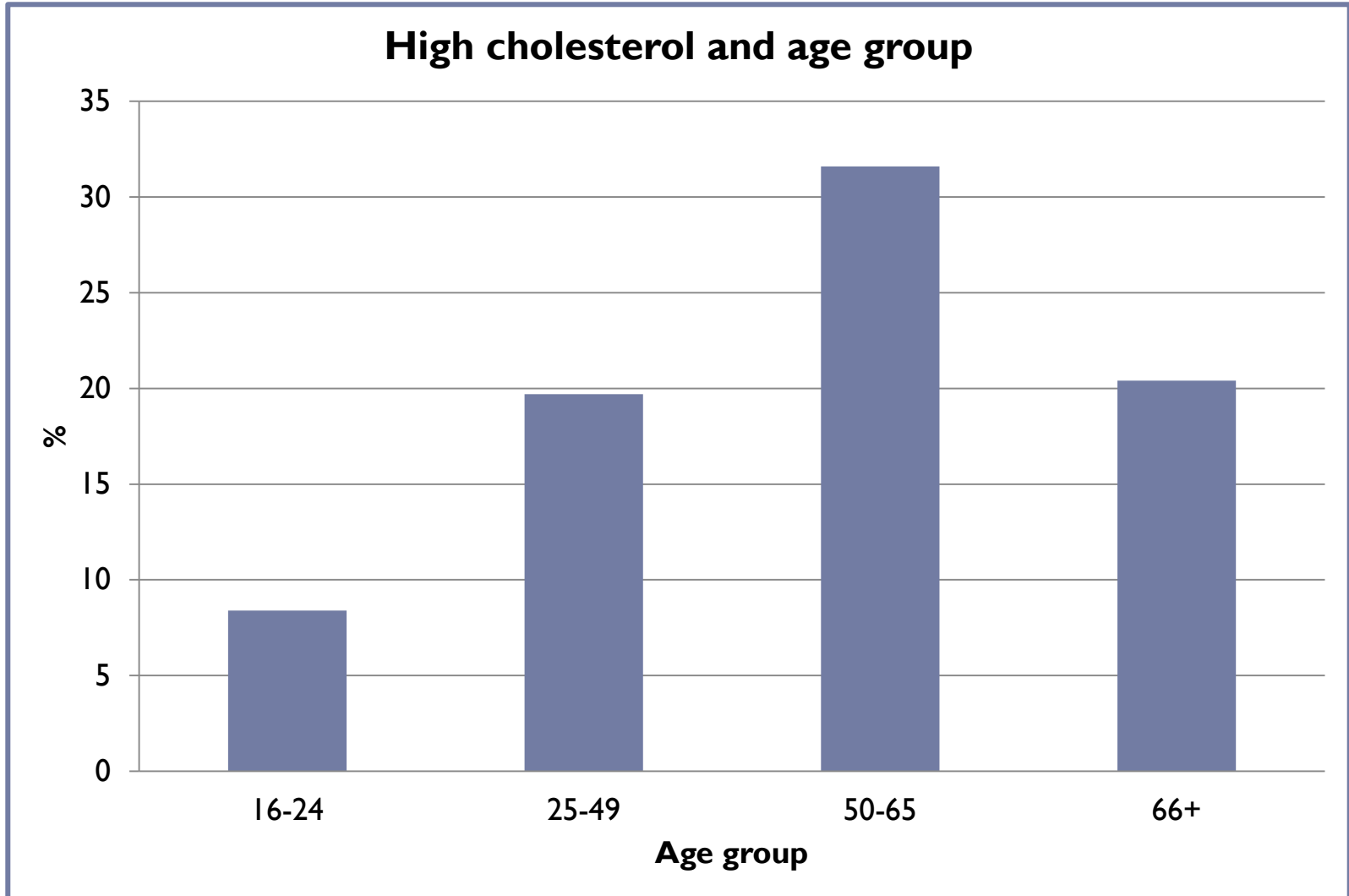


Biometric Health Outcomes & Age Groups: Body Composition - Body Mass Index (BMI)



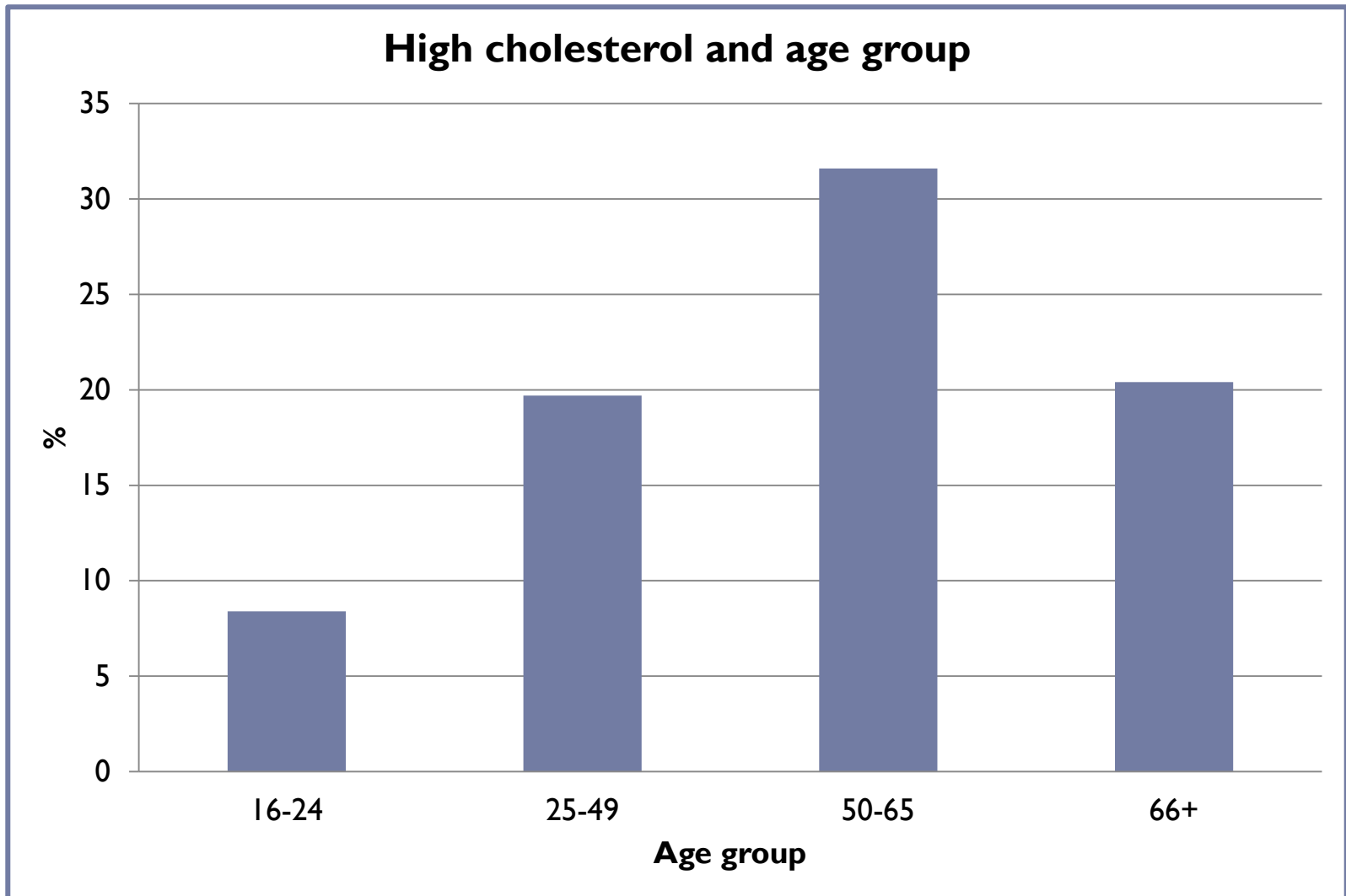


Biometric Health Outcomes & Age Groups: High Cholesterol



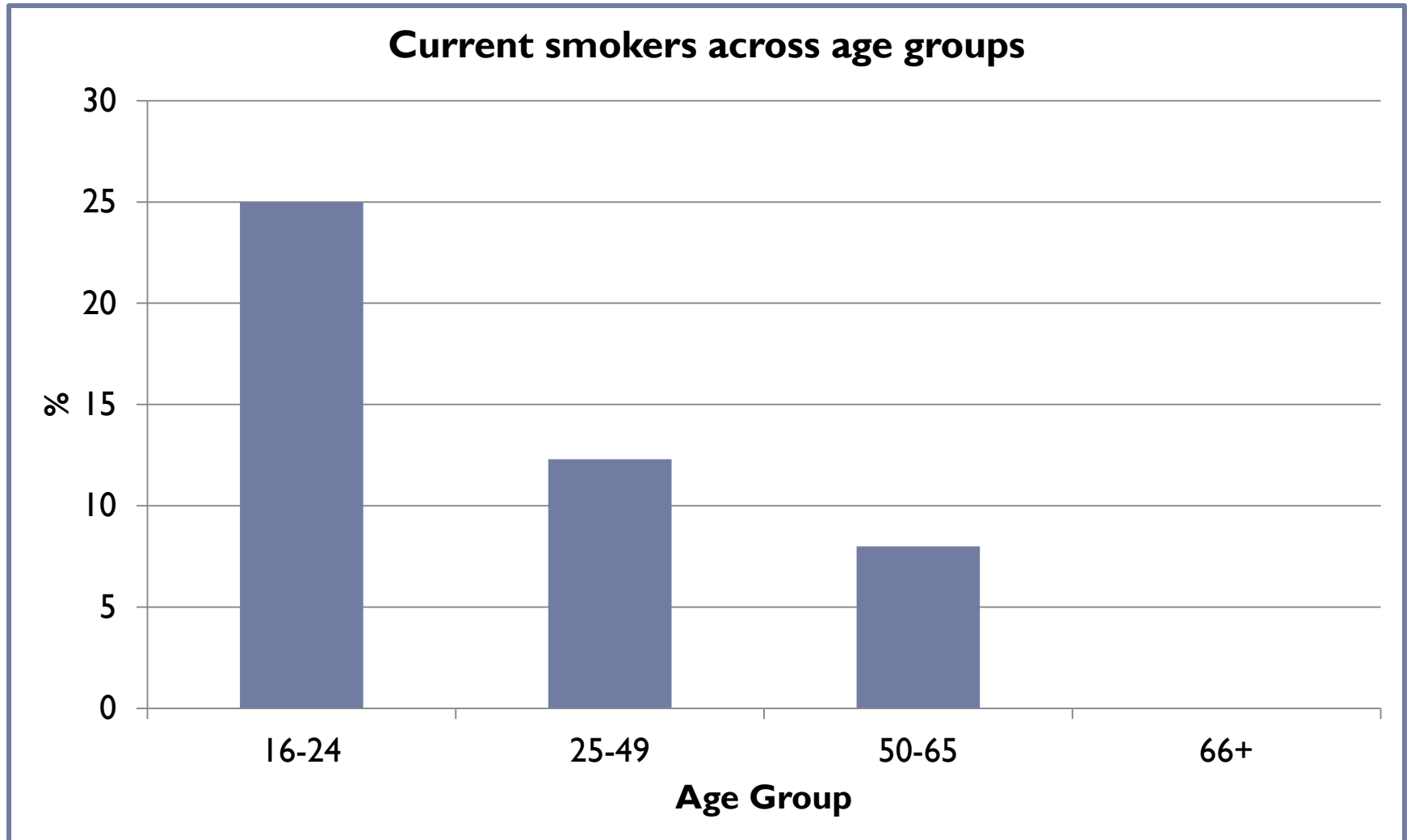


Biometric Health Outcomes & Age Groups: High Cholesterol





Behavioural Risk Factors: Smoking & Age Group

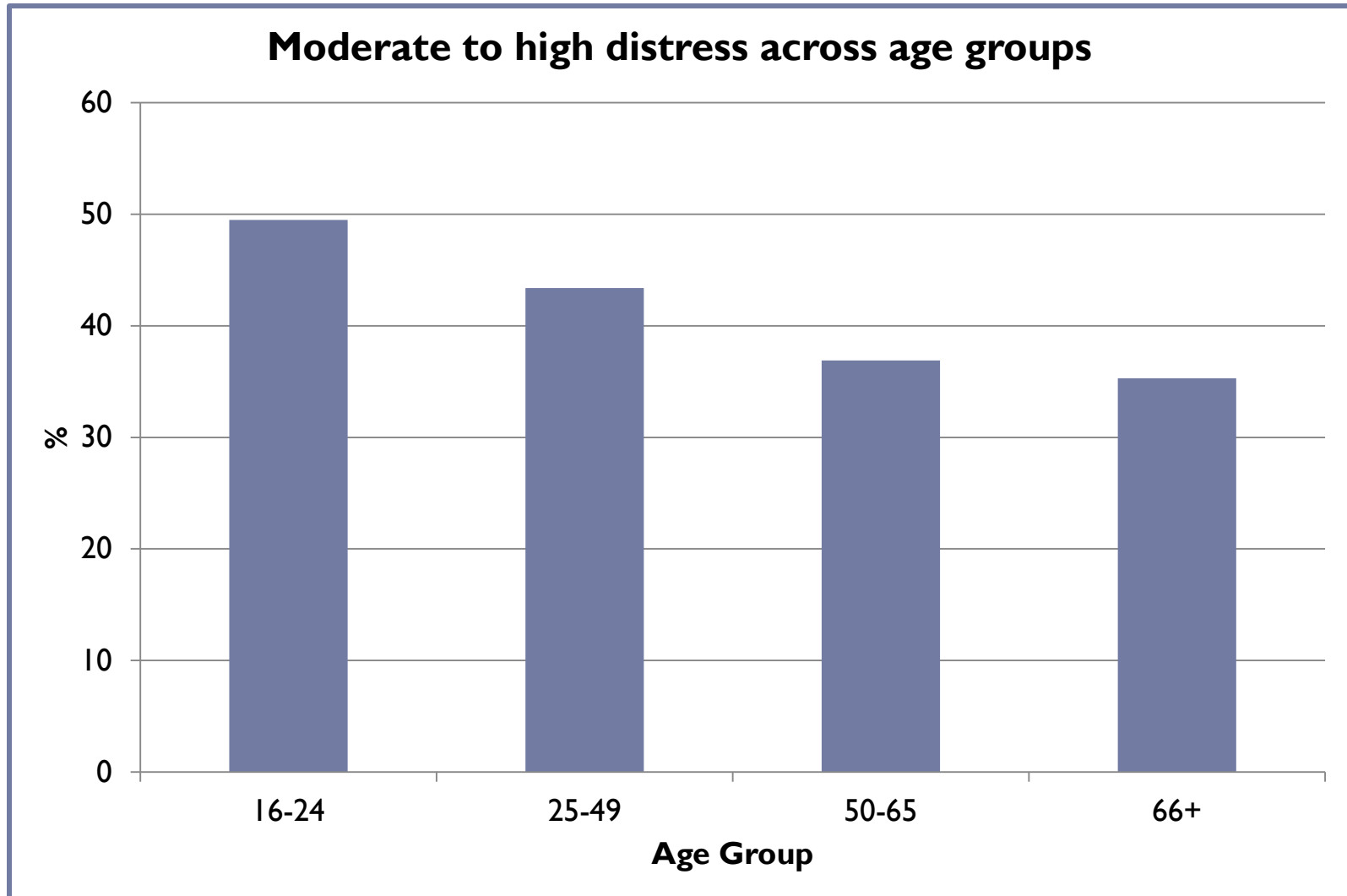


Behavioural Risk Factors: Alcohol Group and Physical Activity & Age group

- ▶ When examining those considered to be drinking alcohol at-risk levels, the greatest proportion were aged between 45 and 54 years (55.3%), followed by 25 to 34 years (24.2%). None of those age 65 years and over were consider to be at-risk.
- ▶ Intense exercise was the greatest in 16 – 24 year olds (147.8 minutes/week) and the lowest in 55 – 64 year olds (99.1 minutes per week).



Mental Health: Psychological Distress & Age Group





Mental health: Stress across age groups

- ▶ More than half of both females and males reported moderate or high stress levels, with levels being similar between genders.
- ▶ High stress was reported by 17.4% females and 18.7% males. Moderate stress levels were reported by 52.9% females and 47.2% males.
- ▶ Nationally, 74% of working women report that stress is having at least some impact on mental health



Summary of differences across age groups

The greatest proportions of overweight and obese individuals were aged 50 years and over.

Blood pressure increased with age

One in four 16 to 24 year olds are current smokers

45 to 54 year olds were most at risk of risky drinking levels

Nearly 50% of 16 to 24 year olds report moderate to high distress

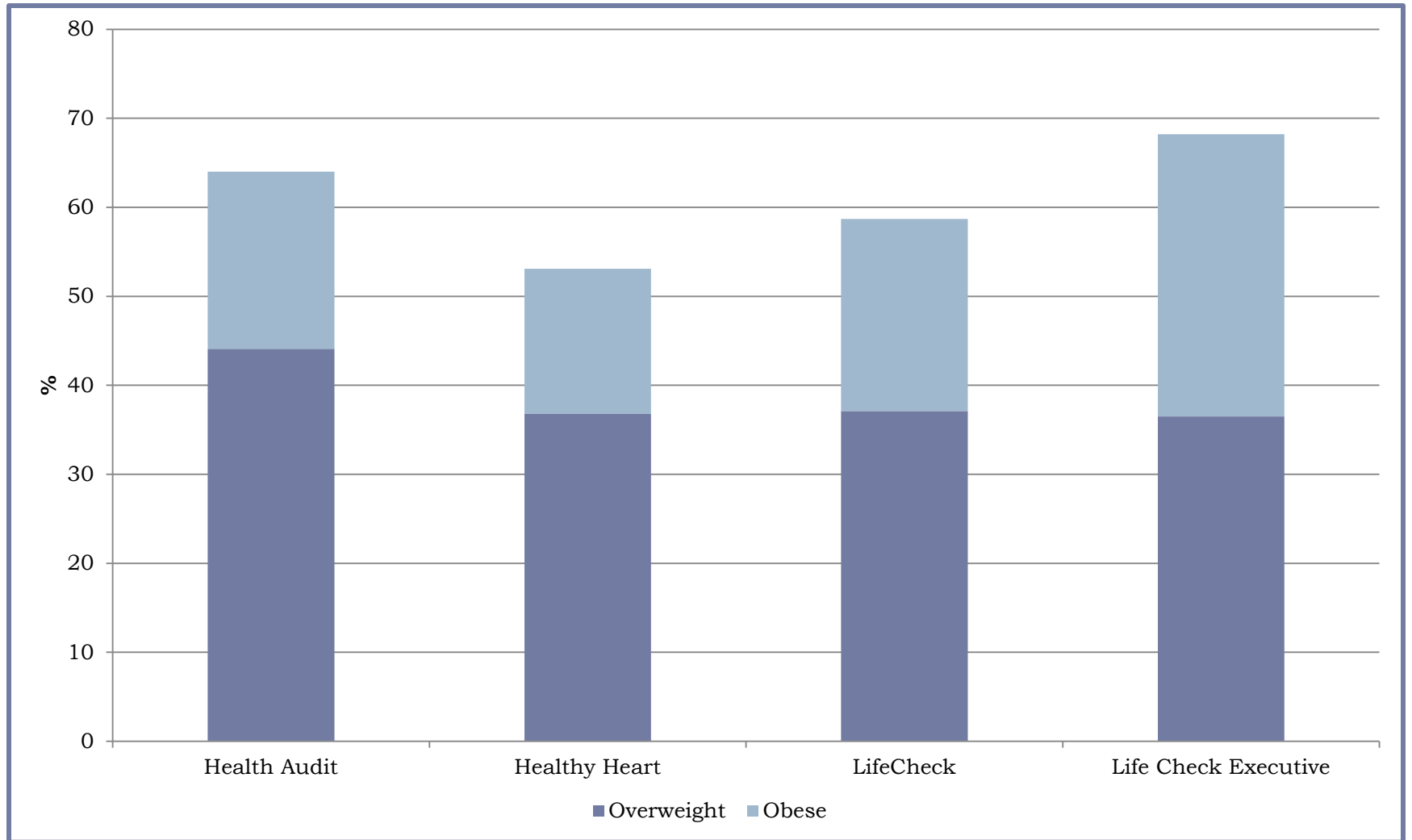




Interventions (health check)



Body Mass Index across assessment types

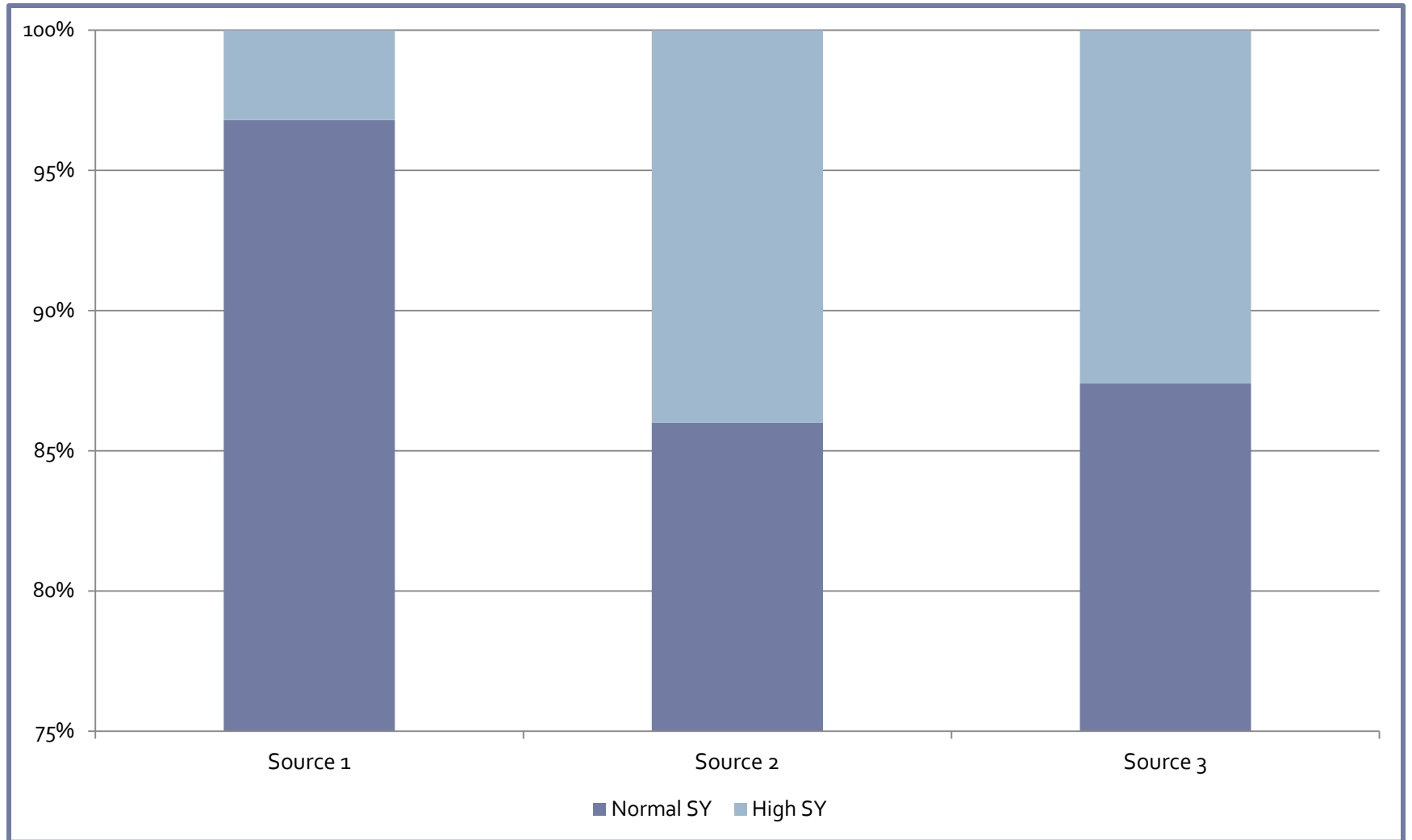




Health Outcomes by Source



Systolic blood pressure by source



Strengths and Limitations

Strengths

This study provides a novel insight into the Australian working population, and has a number of strengths, including:

- ▶ Large sample size;
- ▶ Multiple organisations;
- ▶ Data across 10 years; and
- ▶ Various indicators of health, including both mental and physical health are captured.

Limitations

Several limitations of this study need to also be acknowledged.

These include:

- ▶ Data were unable to be matched across time, thus interindividual change was not captured;
- ▶ Health outcomes were measured inconsistently at times across years and organisations;
- ▶ Intervention detail was lacking;
- ▶ Work-related variable details were also lacking, for instance, work hours and management level.

Recommendations

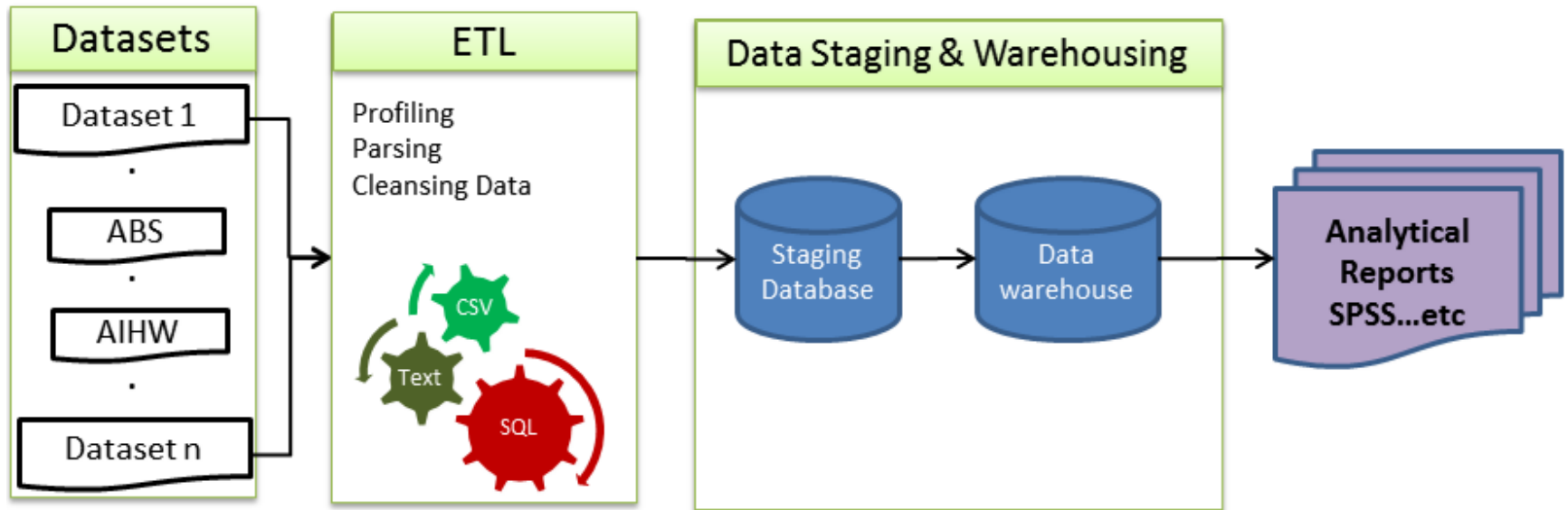
Recommendations include:

Data collection and integration process

Core items for future data collection

Other recommendations

Recommendation to improve data collection and integration





Recommendations for core set of items

Includes:

- ▶ Age/Date of birth
- ▶ Marital status
- ▶ Demographic variables (e.g. country of birth, language spoken at home)
- ▶ Education level (e.g. highest education level)
- ▶ Self-assessed health (e.g. Short-form Health Survey SF-12)
- ▶ Biometric variables (e.g. cholesterol, blood pressure)
- ▶ Health conditions (e.g. diabetes, heart condition)
- ▶ Health risk factors (e.g. alcohol consumption, physical activity)
- ▶ Organisational factors (e.g. job demands, work-family balance,)
- ▶ Organisational outcomes (e.g. presenteeism, absenteeism)
- ▶ Mental health (e.g. psychological distress, burnout)





Other recommendations

The following recommendations are made in order to facilitate timely and accurate feedback of findings. Further, it will also improve accuracy and usefulness of data in to the future.

- ▶ Coding data to allow matching over time
- ▶ Including intervention detail
- ▶ Including demographic and job details
- ▶ Regular analysis and cleaning of data
- ▶ Regular reporting and presenting of data

