



Gender differences in inequalities in asthma: The North West Adelaide Health Study

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Lyell McEwin Health Services



THE UNIVERSITY
OF ADELAIDE
AUSTRALIA





Asthma and social inequalities

Inequity in health:

“the systematic and potentially remediable differences in health across population groups defined socially, economically, demographically or geographically.”

International Society for Equity in Health

Asthma and social inequalities

- Not all population groups experience chronic conditions, eg. asthma, equally
- Societal determinants of health may directly influence incidence and management of chronic conditions



The North West Adelaide Health Study

- Biomedical cohort study
- Established in 2000
- Collaboration between The Queen Elizabeth Hospital, Lyell McEwin Health Service, South Australian Department of Health, University of Adelaide, University of South Australia
- Designed to assess prevalence of priority conditions, risk factors and determinants across continuum, and progression over time

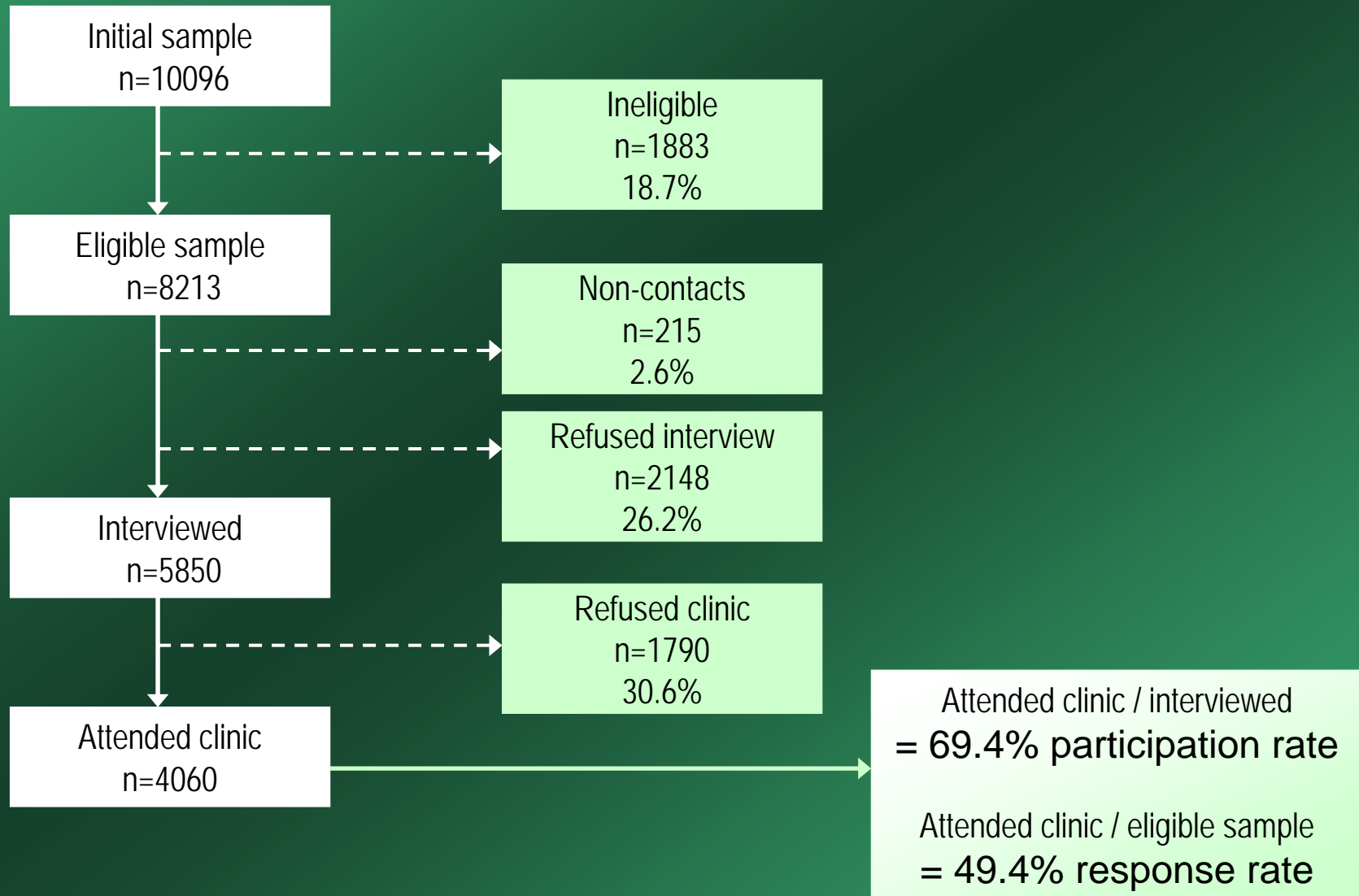
Methods

- Households randomly selected from Electronic White Pages
- Approach letter sent to households
- CATI
- Person last to have birthday, aged 18+ years, selected
- Appointment made to attend clinic
- Information pack sent including questionnaire

Data collection

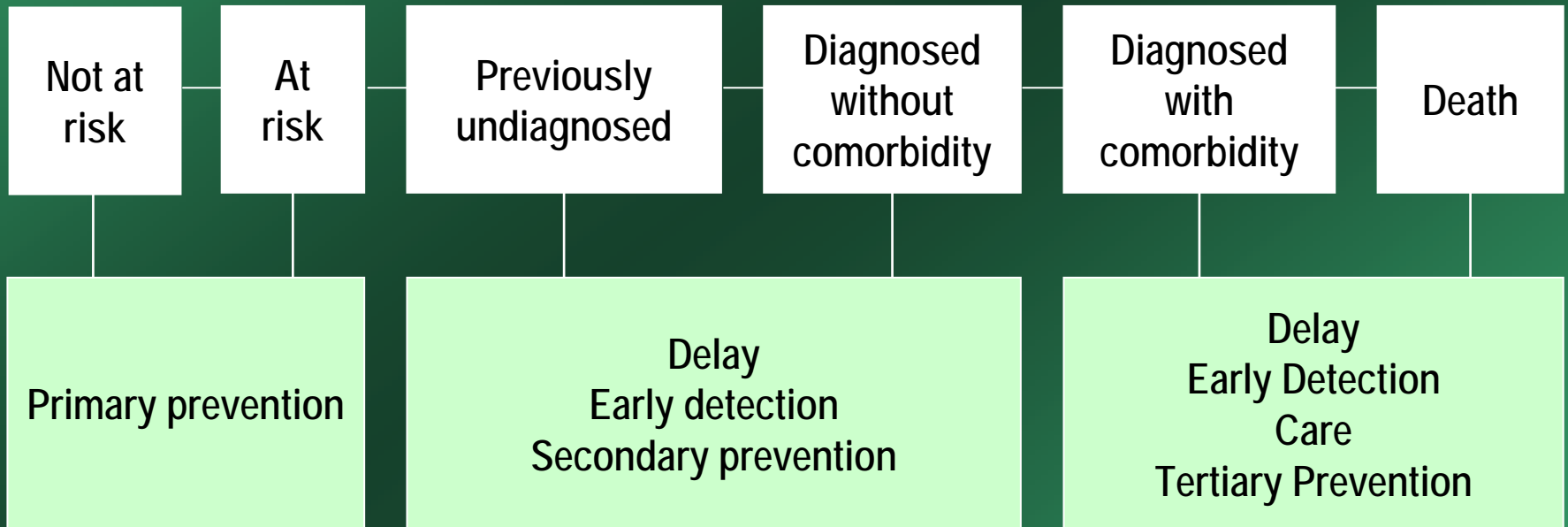
- Telephone
 - Demographics, Chronic conditions, Risk factors
- Self-completed questionnaire
 - Health care utilisation, Quality of life
- Clinic assessment
 - Blood pressure, Height and weight, Waist and hip circumference, Fasting blood test (glucose, lipid profile, HbA1c, creatinine), Lung function spirometry, Skin allergies

Response rate - Stage 1



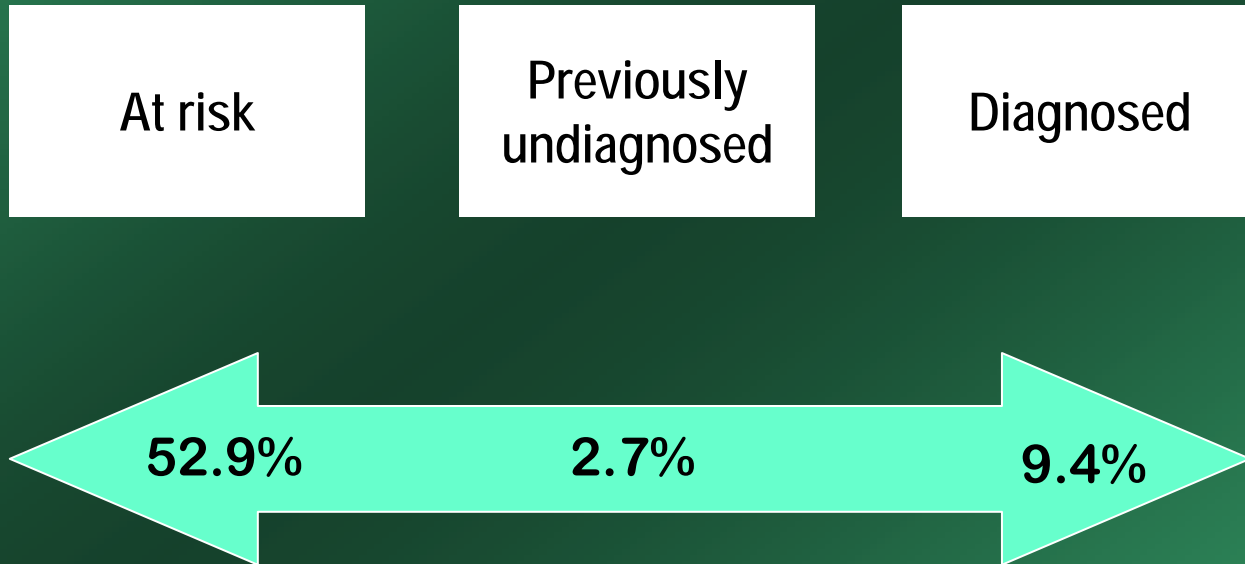
Chronic Disease Continuum

Improved health status / Deteriorating health status

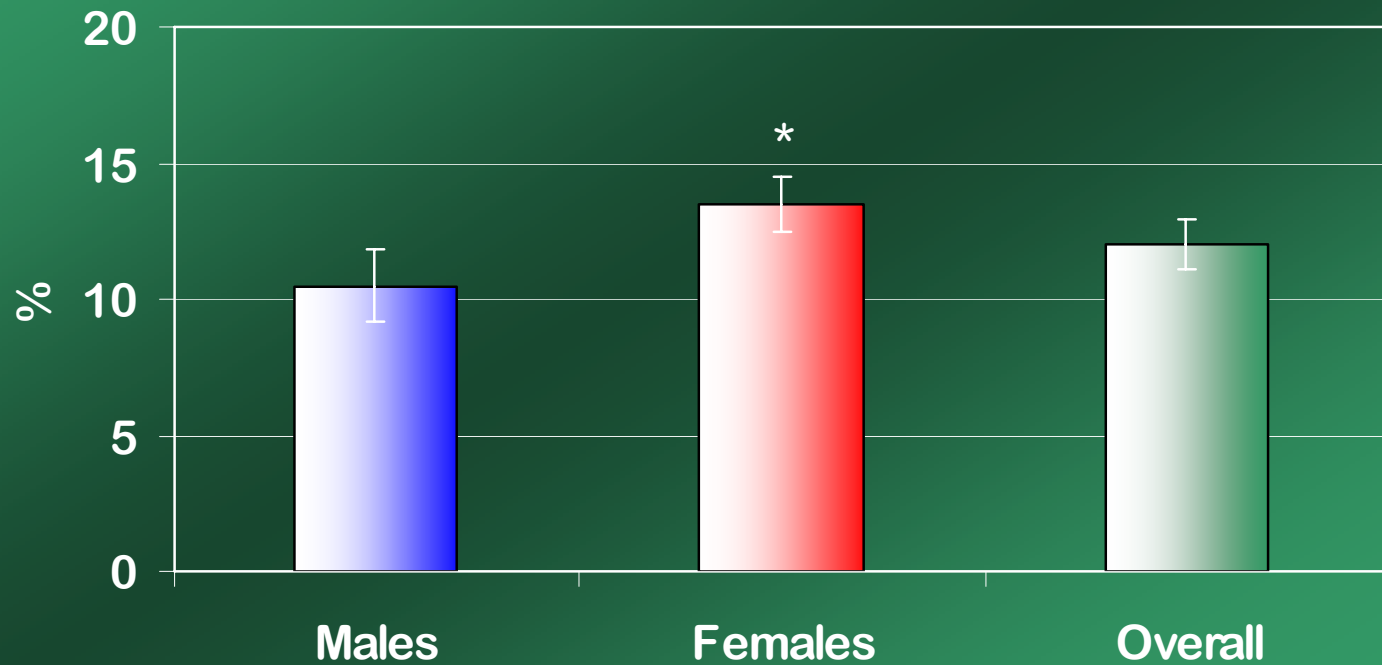


Chronic disease continuum:

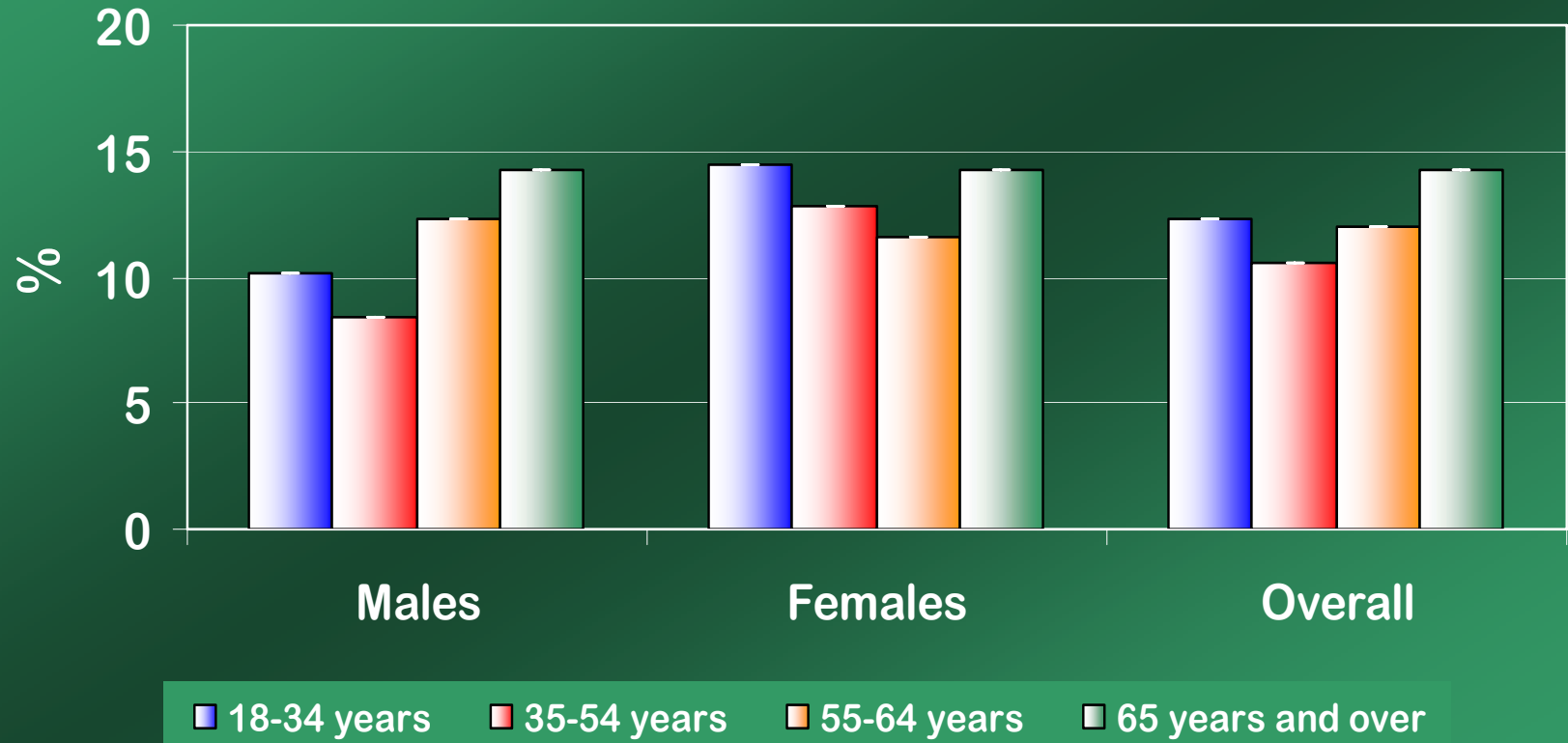
Asthma



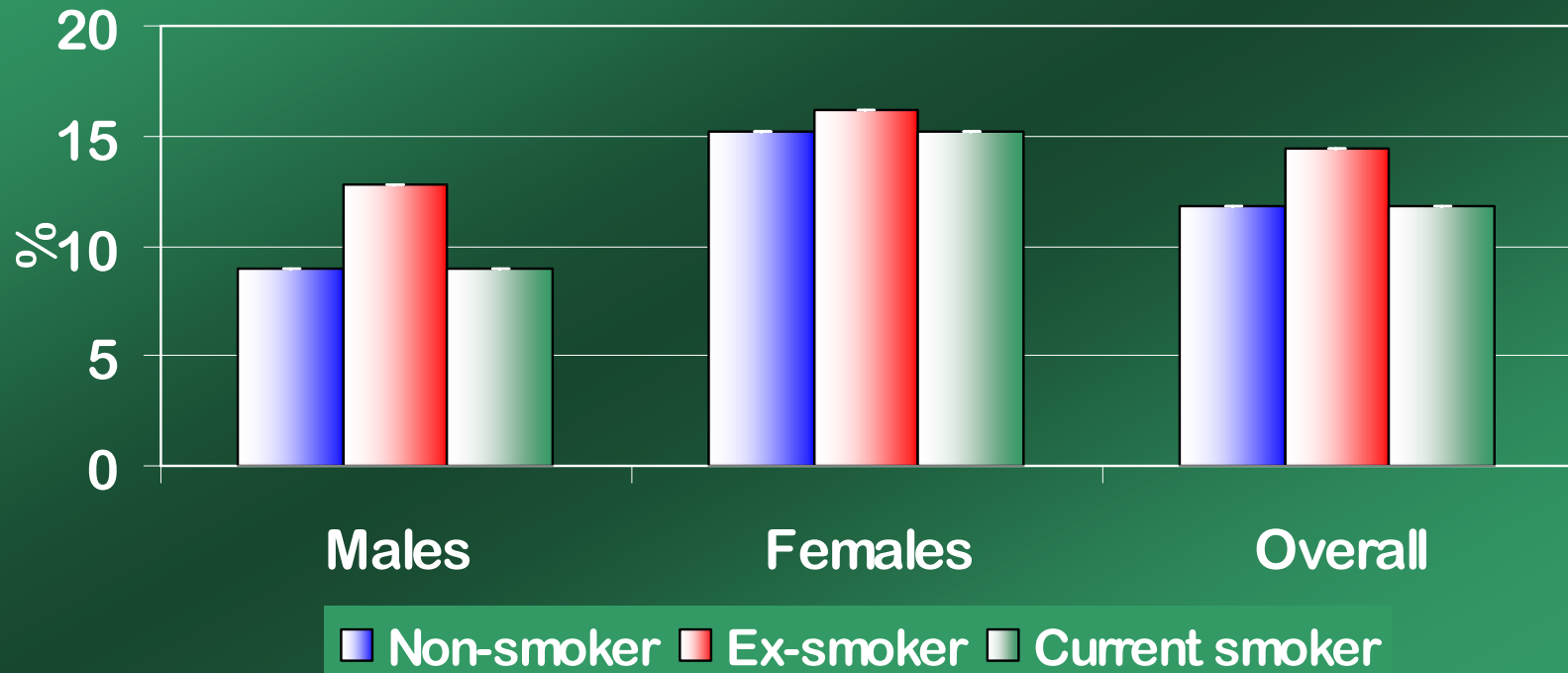
Prevalence of Asthma by Gender



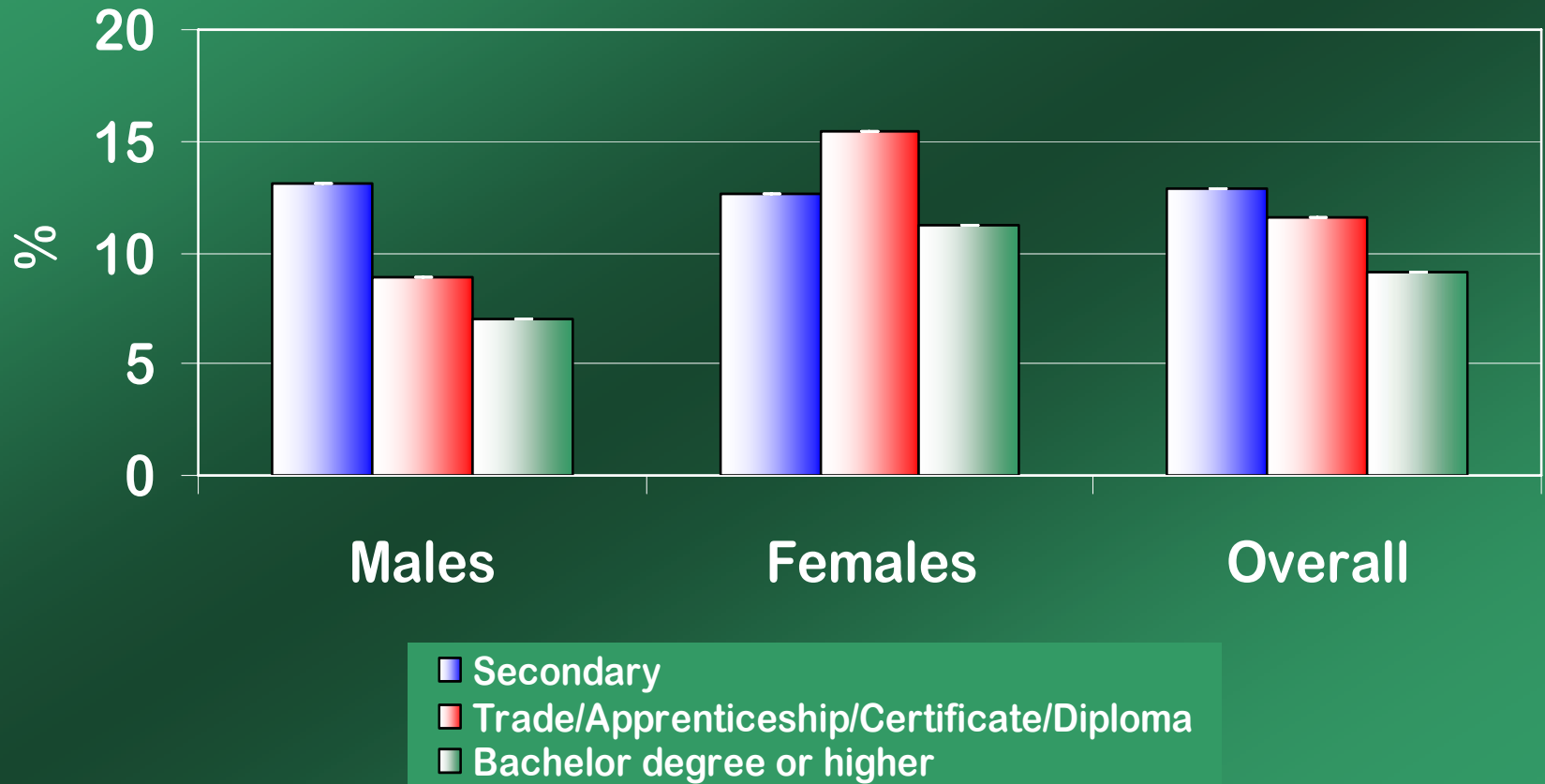
Prevalence of Asthma by Age Group and Gender



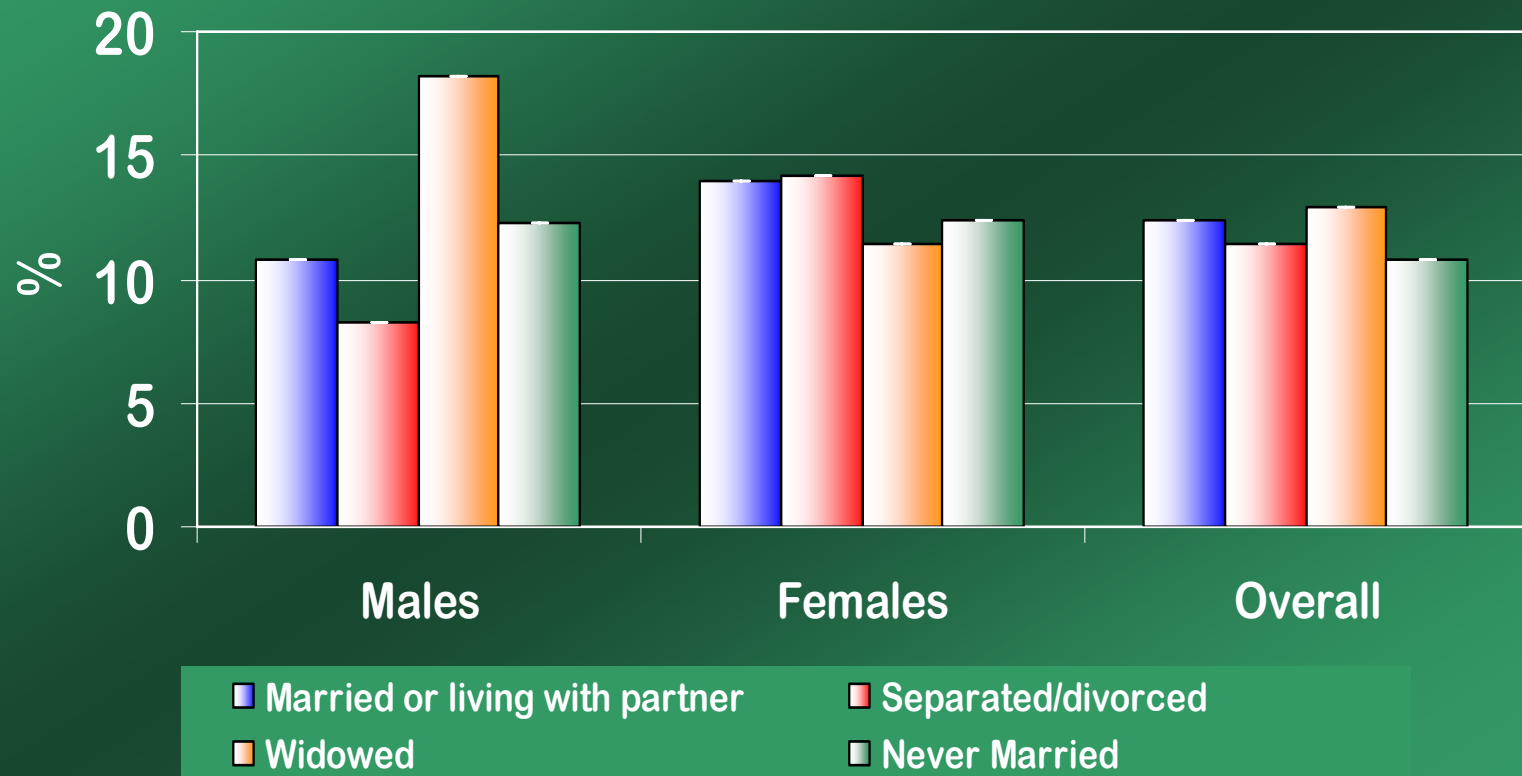
Prevalence of Asthma by Smoking Status and Gender



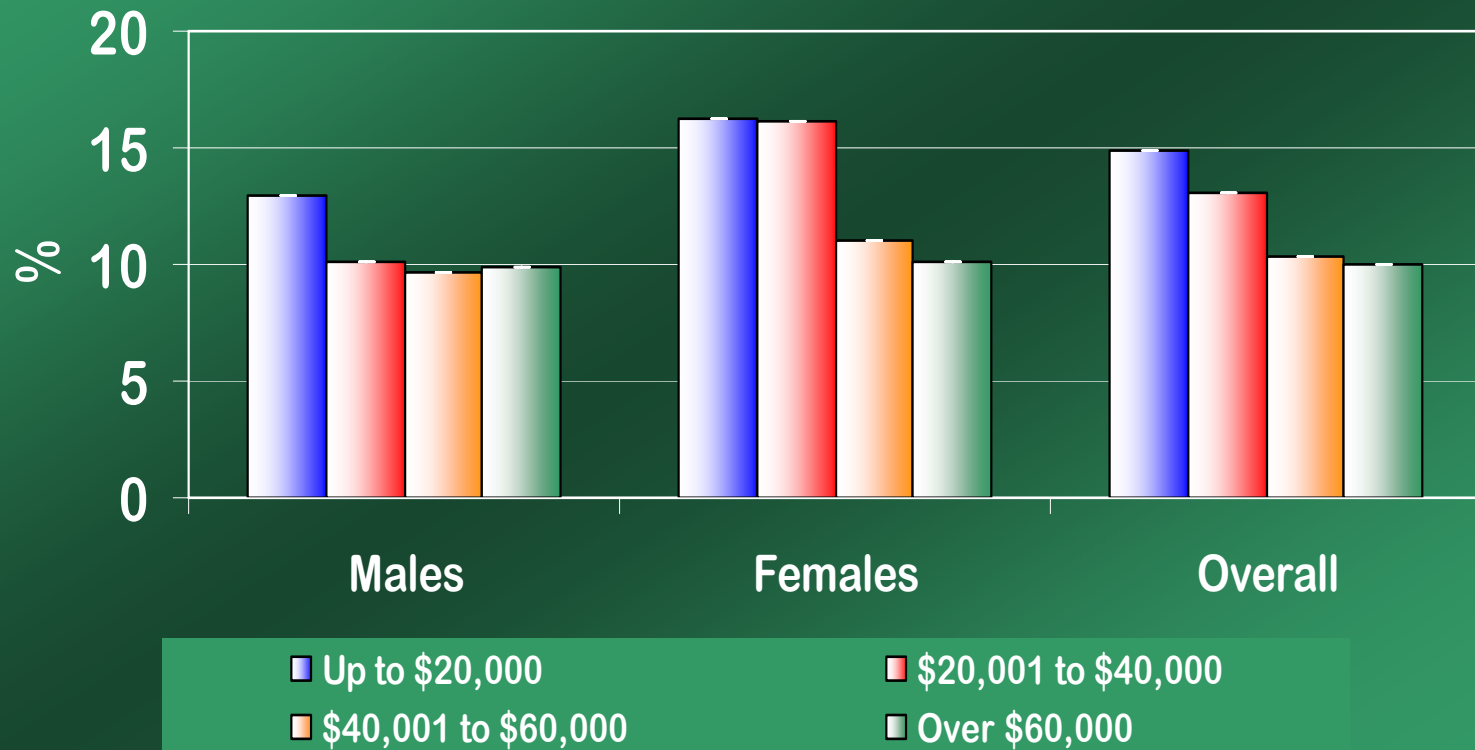
Prevalence of Asthma by Education Level and Gender



Prevalence of Asthma by Marital Status and Gender



Prevalence of Asthma by Income and Gender





Multivariate odds ratios (ORs) for factors associated with asthma - MALES

	OR	(95% CI)	P-value
Education			
Post-secondary	1.00		
Secondary	1.47	(1.09 - 1.99)	0.01
Work Status			
Employed	1.00		
Unemployed	1.74	(1.30 - 2.34)	<0.001

Multivariate odds ratios (ORs) for factors associated with asthma - FEMALES

	OR	(95% CI)	P-value
Age groups			
18 - 34 years	1.00		
35 – 54 years	0.85	(0.62 – 1.16)	0.30
55 – 64 years	0.62	(0.39 – 0.99)	0.05
65 years and over	0.75	(0.50 – 1.12)	0.16
Income			
Up to \$20,000	1.00		
\$20,001 - \$40,000	0.89	(0.62 – 1.26)	0.50
\$40,001 - \$60,000	0.54	(0.35 – 0.83)	0.004
Over \$60,000	0.49	(0.32 – 0.75)	0.001
Smoking status			
Non-smoker	1.00		
Ex-smoker	1.52	(1.13 – 2.05)	0.006
Current smoker	1.28	(0.91 – 1.78)	0.15

Conclusion

- The prevalence of asthma is higher among women than men.
- The relationship between asthma and socioeconomic factors differs for men and women.
- The way social inequalities are measured among men and women, eg. by education, income, employment status, will affect conclusions about associations between socioeconomic factors and asthma.



Contact details

- North West Adelaide Health Study website

<http://www.nwadelaidhealthstudy.org>

- Population Research & Outcome Studies Unit
(SA Department of Health)

<http://www.health.sa.gov.au/pehs/PROS.html>