Who’s skating on thin ice?
North West Adelaide Health Study
Risk Factor Profile

Results from self reported questionnaire and biomedical measurement

Janet Grant, Tiffany Gill, Catherine Chittleborough, Eleonora Dal Grande, Anne Taylor, David Wilson, Patrick Phillips, Richard Ruffin
Organisations involved

- SA Department of Human Services (Centre for Population Studies in Epidemiology)
- The Queen Elizabeth Hospital
- Lyell McEwin Health Service
- The University of Adelaide
- University of South Australia
Overall study aims

- Assess prevalence of priority health problems, risk factors and their demographic distributions

- Segment each chronic condition into subgroups along a continuum and track cohort over time
Chronic disease continuum

- Not at risk
  - PREVENTION
- At risk
  - Previously undiagnosed
  - DELAY / EARLY DETECTION
- Diagnosed without comorbidity
- Diagnosed with comorbidity
  - PREVENTION / DELAY / EARLY DETECTION / CARE
- Death

Deteriorating health status / Increasing severity of disease
Methods/results - overall

- North West region of Adelaide
- n=2523
- Random recruitment – using CATI (Computer Assisted Telephone Interview)
- Self-administered questionnaire
- Attendance at clinic
- Participation rate of 69.1%
- Data was weighted by area, age, sex and probability of selection in the household
Methods – CATI recruitment

- Households randomly selected from EWP (Electronic White Pages)
- North West area of Adelaide (excluding Tea Tree Gully) selected
- Introductory letter sent
- Appointment made to attend clinic
- Other questions included self reported health conditions, mental health, smoking status, reason for not wanting to participate
- Participants sent information folder containing questionnaire to complete
Methods - questionnaire

- Self-reported diabetes, asthma, COPD (emphysema and bronchitis)
- SF-36
- Risk factors (smoking, physical activity, alcohol consumption, family history of diabetes, heart disease and stroke)
- Health service use
- Demographics
Methods – clinic assessment

- Blood pressure
- Height and weight measurements
- Waist and hip circumference
- Fasting blood sample - glucose, lipid profile, glycated haemoglobin
- Allergy skin test- rye grass, cat, house dust mite, alternaria (mould), feather and cockroach
- Lung function tests - spirometry followed by Ventolin inhalation and retesting
Smoking

Current (self report)

Prevalence of current smoking (%)

Age (years)

18 to 29 30 to 39 40 to 49 50 to 59 60 to 69 70 and over

Males  
Females
Alcohol

Intermediate to very high risk (self report)

Prevalence of alcohol risk (%)

- Males
- Females

Age groups:
- 18 to 29 years
- 30 to 39 years
- 40 to 49 years
- 50 to 59 years
- 60 to 69 years
- 70 years & over
Family history of diabetes

![Graph showing prevalence of family history of diabetes by age and gender.](image-url)
## Family history of heart disease

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Prevalance of a family history of heart disease (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 29 years</td>
<td>Male: 45%  Female: 40%</td>
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<tr>
<td>30 to 39 years</td>
<td>Male: 48%  Female: 43%</td>
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<tr>
<td>40 to 49 years</td>
<td>Male: 50%  Female: 45%</td>
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<tr>
<td>50 to 59 years</td>
<td>Male: 55%  Female: 50%</td>
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<tr>
<td>60 to 69 years</td>
<td>Male: 52%  Female: 47%</td>
</tr>
<tr>
<td>70 years and over</td>
<td>Male: 50%  Female: 45%</td>
</tr>
</tbody>
</table>
Family history of stroke

Prevalance of a family history of stroke (%)

Age (years)

18 to 29 years
30 to 39 years
40 to 49 years
50 to 59 years
60 to 69 years
70 years and over

Male
Female
Body mass index

Overweight (clinical measurement)

Prevalence of overweight as measured by BMI (%)

- **Males**
- **Females**

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Males</th>
<th>Females</th>
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<tbody>
<tr>
<td>18 to 29 years</td>
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Body mass index

Obesity (clinical measurement)

Prevalence of obese people as determined by BMI (%)

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<tbody>
<tr>
<td>18 to 29 years</td>
<td>15%</td>
<td>22%</td>
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<tr>
<td>30 to 39 years</td>
<td>23%</td>
<td>30%</td>
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<tr>
<td>40 to 49 years</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>50 to 59 years</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>60 to 69 years</td>
<td>18%</td>
<td>28%</td>
</tr>
<tr>
<td>70 years and over</td>
<td>10%</td>
<td>15%</td>
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</tbody>
</table>
High blood pressure
(clinical measurement)

Prevalence of high blood pressure (%)

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North West Adelaide Health Study
High cholesterol
(clinical measurement)

Age (years)

Prevalence of high cholesterol (%)

Males
Females

18 to 29 years
30 to 39 years
40 to 49 years
50 to 59 years
60 to 69 years
70 years and over
Physical activity

Inactivity (self report)

![Bar chart showing prevalence of insufficient activity by age and gender]

- **Prevalence of insufficient activity (%)**
- **Age in years**:
  - 18 to 29 years
  - 30 to 39 years
  - 40 to 49 years
  - 50 to 59 years
  - 60 to 69 years
  - 70 years and over

- **Gender**:
  - Male
  - Female
Multiple risk factors

**MALES**

<table>
<thead>
<tr>
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<th>4 to 5</th>
<th>6 to 9</th>
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**FEMALES**

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Contact details

- North West Adelaide Health Study website: http://www.nwadelaidehealthstudy.org