The ongoing monitoring and surveillance of chronic disease and risk factors in South Australia

Tiffany Gill
Associate Professor Anne Taylor
Where is SA?
The South Australian Monitoring and Surveillance System (SAMSS) has been in operation since July 2002.

- Telephone survey.
- 600 interviews every month.
- Random, representative sample of all ages from the SA population.
- Surrogate interviews for those aged 15 years and under.
Monitoring and Surveillance in SA

- Chronic conditions, risk factors and other health priority areas are examined.
- Demographic information is also collected.
- Uses of SAMSS include monitoring the prevalence of chronic conditions and risk factors at both a point in time and over time.
Monitoring and Surveillance in SA

- Prevalence of chronic conditions or risk factors is one method of examining data.

- Trend analysis another method.

- Time factor is important.
• However prevalence may not change rapidly over time.
• Data can be examined in relation to other demographics such as income, work status, age or sex.
• Differences in trends may be observed.
Monitoring and Surveillance in SA

• But also can examine in relation to other chronic conditions and risk factors.

• Also provides important information.
Questions asked

• “Have you ever been told by a doctor that you have…..”
  – Osteoporosis.
  – Diabetes.
  – Arthritis (combined variable of types of OA, RA, Juvenile arthritis, other forms, don’t know type).
  – Cardiovascular disease (CVD, combined variable of heart attack, stroke, heart disease and angina).
Questions asked

• “Have you ever been told by a doctor or a nurse you have high blood pressure?”

And

• “Are you on tablets or other prescribed medication for blood pressure?”

• Indication of current high blood pressure (HBP).
Questions asked

- “Have you ever been told by a doctor or a nurse you have high cholesterol?”
- “Are you on tablets or other prescribed medication for high cholesterol?”
- Indication of current high cholesterol.
Prevalence over time

- Between July 2002 and August 2007, the yearly prevalence of:
  - Arthritis
  - Osteoporosis
  - CVD
  - Diabetes
- Has been determined for respondents aged 16 years and over.
Prevalence over time

• Between July 2003 and August 2007, the yearly prevalence of:
  – Current high blood pressure.
  – Current high cholesterol

• Has been determined for respondents aged 16 years and over.
## Prevalence at points in time

<table>
<thead>
<tr>
<th>Condition</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis</td>
<td>20%-22%</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>3%-5%</td>
</tr>
<tr>
<td>CVD</td>
<td>7%-9%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>5%-7%</td>
</tr>
<tr>
<td>HBP</td>
<td>16%-19%</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>12%-15%</td>
</tr>
</tbody>
</table>

Data source: SAMSS July 2002 to August 2007
Arthritis over time

Data source: SAMSS July 2002 to August 2007. No significant trend, exponentially smoothed
Arthritis by obesity

Data source: SAMSS July 2002 to August 2007. No significant trend for no obesity or obesity, exponentially smoothed
Osteoporosis over time

Data source: SAMSS July 2002 to August 2007. No significant trend, exponentially smoothed.
Osteoporosis by smoking status

Data source: SAMSS July 2002 to August 2007. Significant trend Non/ex smokers ARIMA (1,0,1). No significant trend for current smokers, exponentially smoothed.
CVD over time

Data source: SAMSS July 2002 to August 2007. Significant trend, ARIMA (3,0,0)
CVD by obesity

Data source: SAMSS July 2002 to August 2007. No significant trend for no obesity or obesity, exponentially smoothed
Diabetes over time

Data source: SAMSS July 2002 to August 2007. No significant trend, exponentially smoothed
Diabetes and CVD

Data source: SAMSS July 2002 to August 2007. No significant trend for no CVD or CVD, exponentially smoothed
HBP over time

Data source: SAMSS July 2003 to August 2007. No significant trend, exponentially smoothed
HBP and CVD

Data source: SAMSS July 2003 to August 2007. No significant trend for no CVD or CVD, exponentially smoothed
High cholesterol over time

Data source: SAMSS July 2003 to August 2007. No significant trend, exponentially smoothed
High cholesterol and CVD

Data source: SAMSS July 2003 to August 2007. No significant trend for no CVD or CVD, exponentially smoothed
Conclusions

- Analysis of trends can also provide meaningful information for policy makers and planners.

- Interpretation of the results and dissemination are important.

- Data can then be translated into action.
Population Research and Outcome Studies Unit

South Australian Department of Health

Website