



Government  
of South Australia

Department of Health

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

Tiffany Gill

Associate Professor Anne Taylor



# Where is SA?



# Monitoring and Surveillance in 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.



# Monitoring and Surveillance in SA

- 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?”

And

- “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.



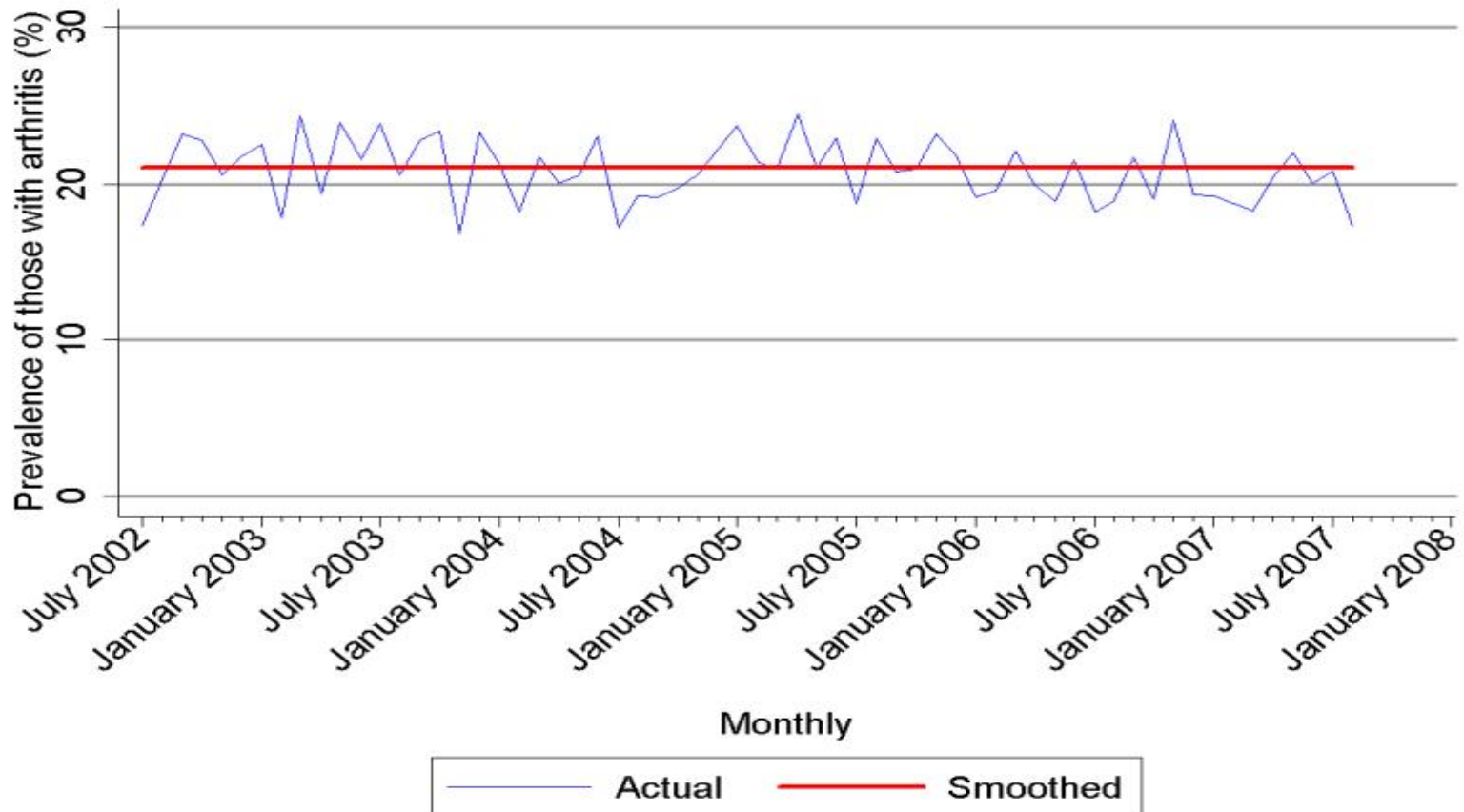
# Prevalence at points in time

	Range
Arthritis	20%-22%
Osteoporosis	3%-5%
CVD	7%-9%
Diabetes	5%-7%
HBP	16%-19%
High cholesterol	12%-15%

Data source: SAMSS July 2002 to August 2007

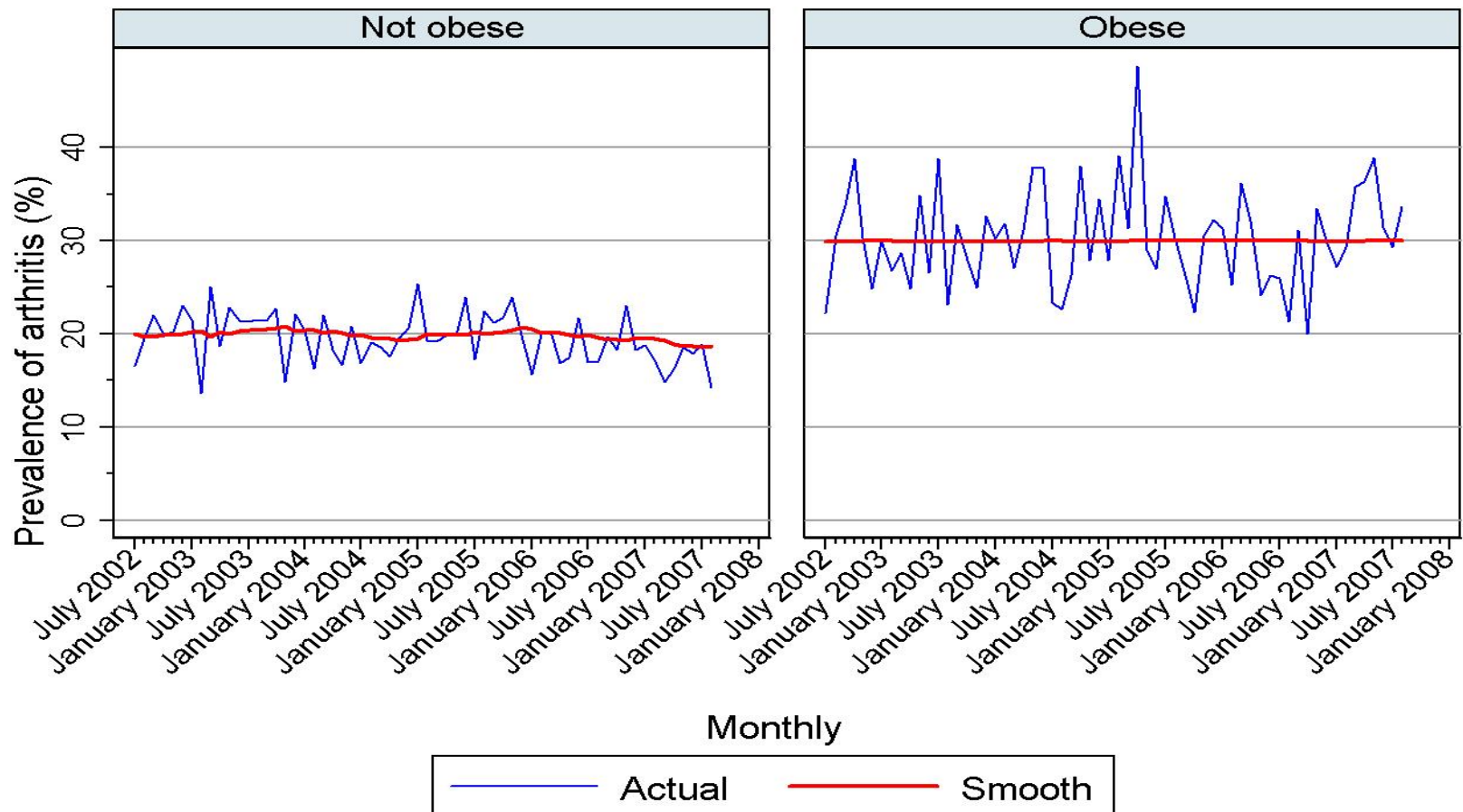


# Arthritis over time



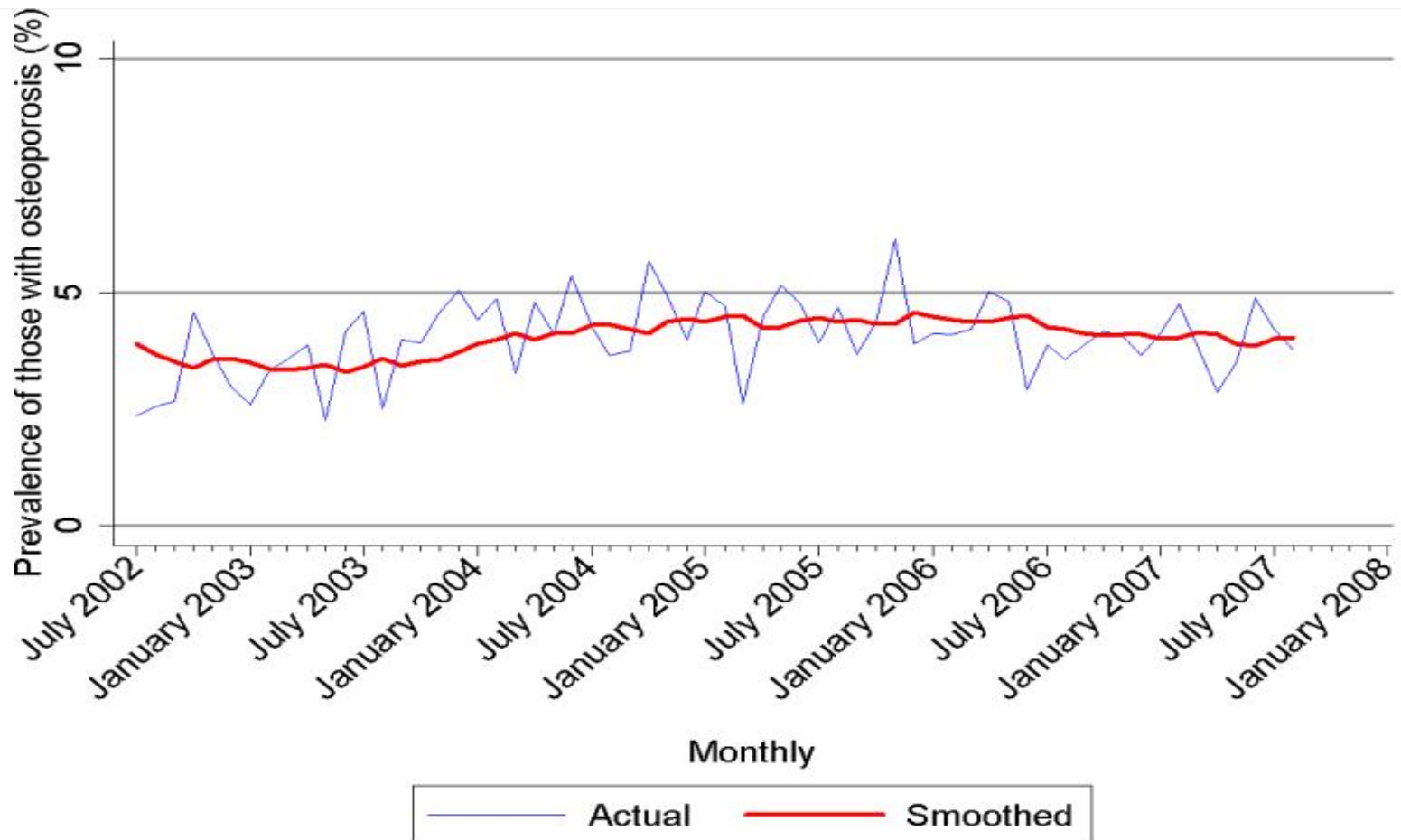
Data source: SAMSS July 2002 to August 2007. No significant trend, exponentially smoothed

# Arthritis by obesity



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

# Osteoporosis over time

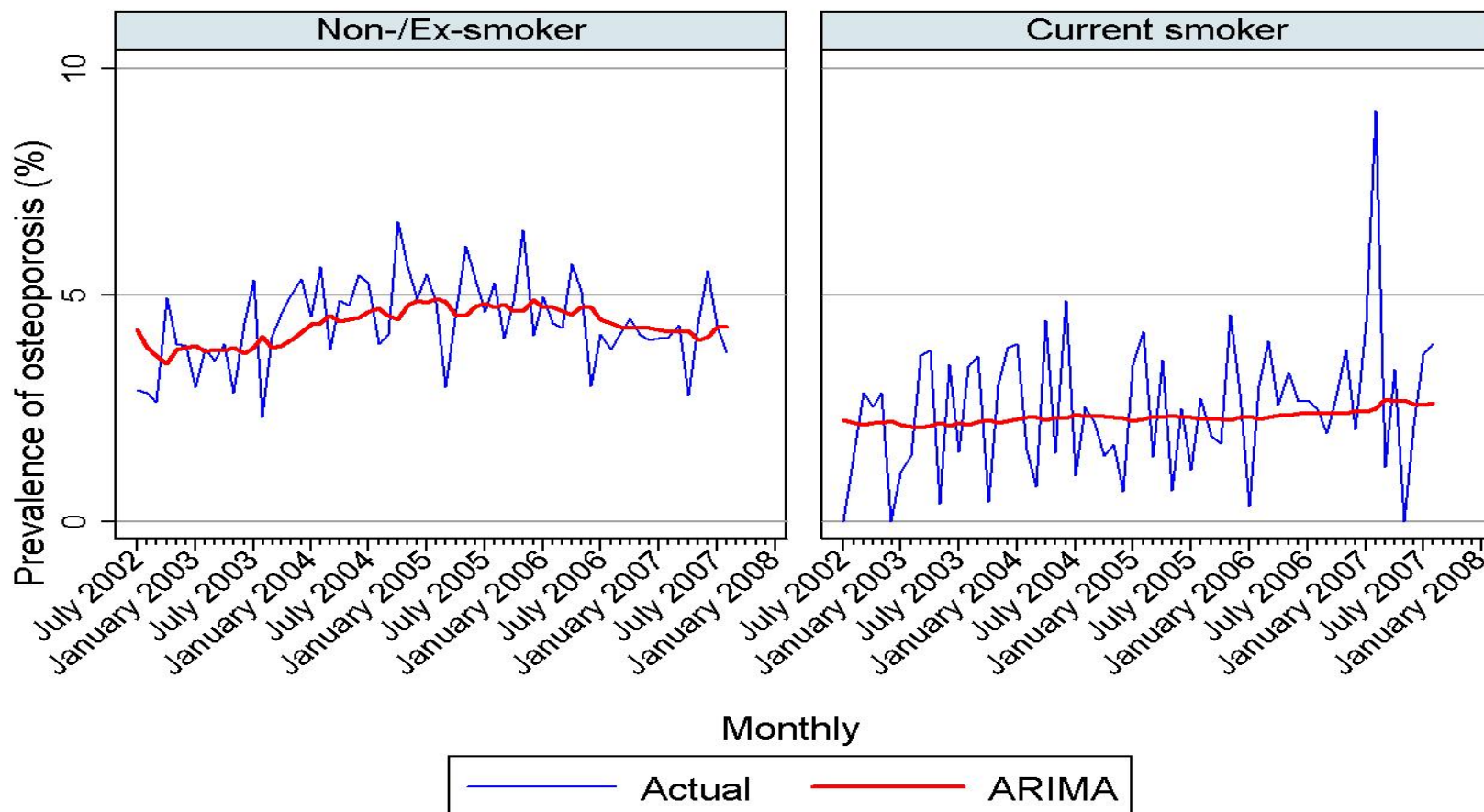


Data source: SAMSS July 2002 to August 2007. No significant trend, exponentially smoothed



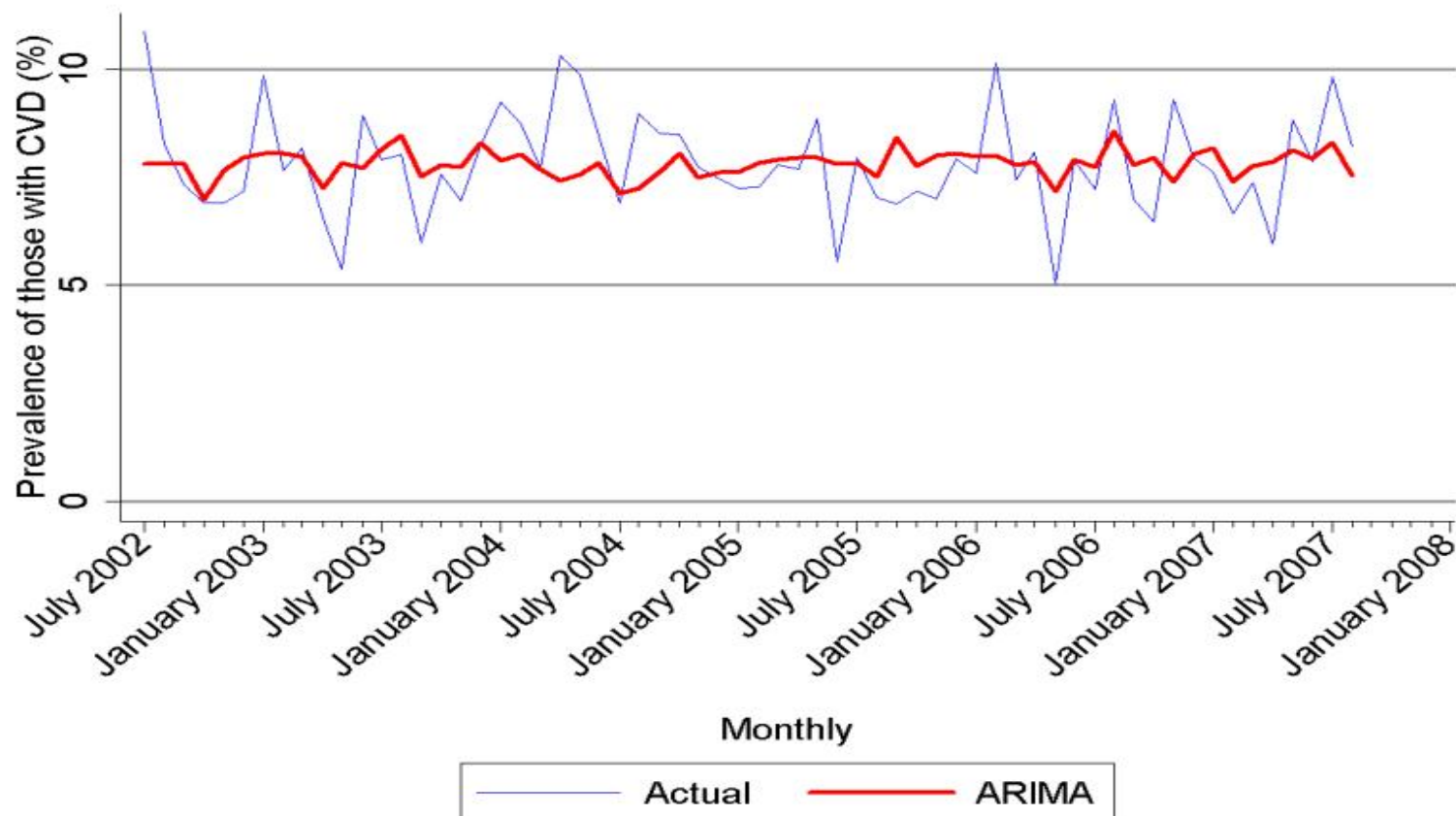


# Osteoporosis by smoking status



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

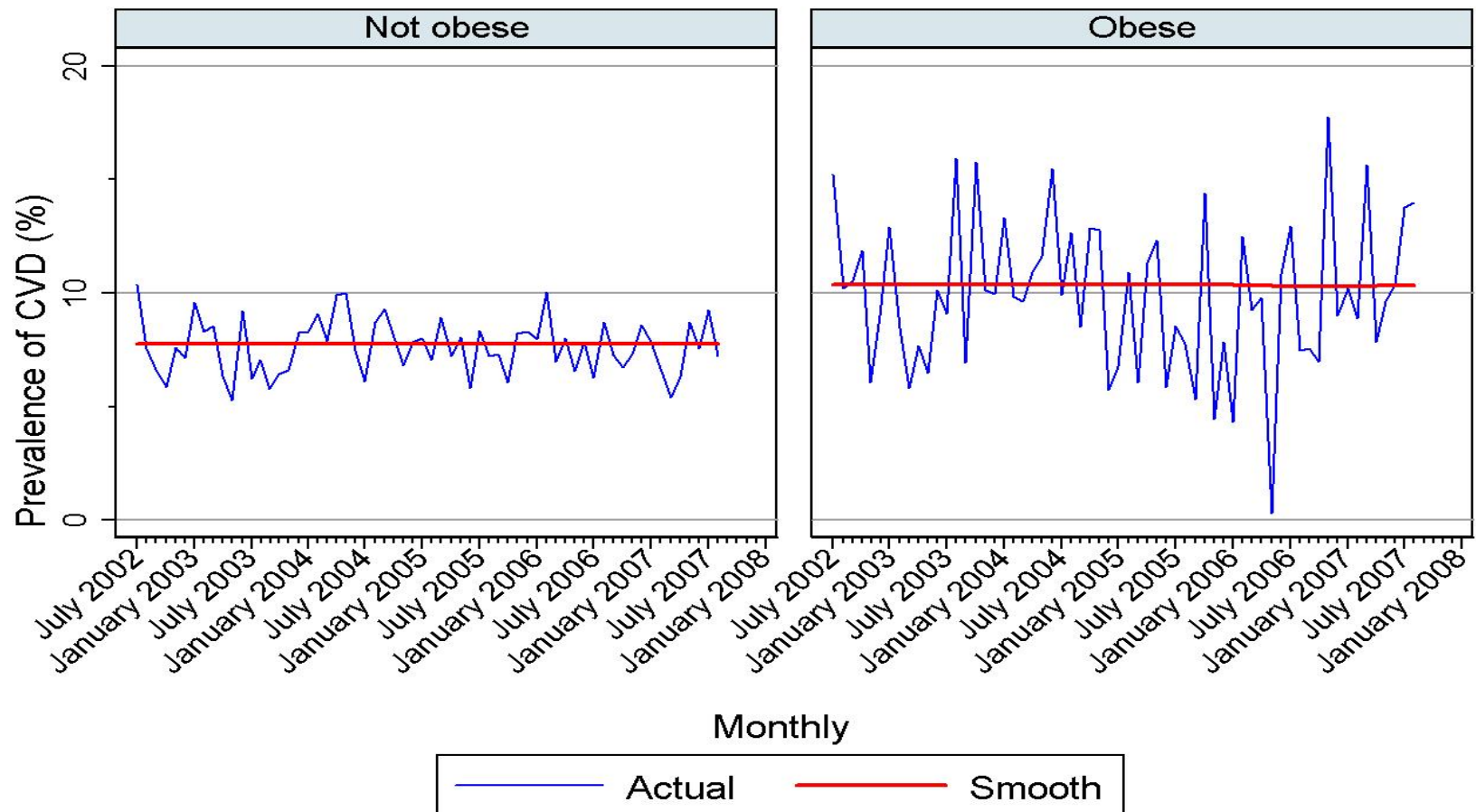
# CVD over time



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

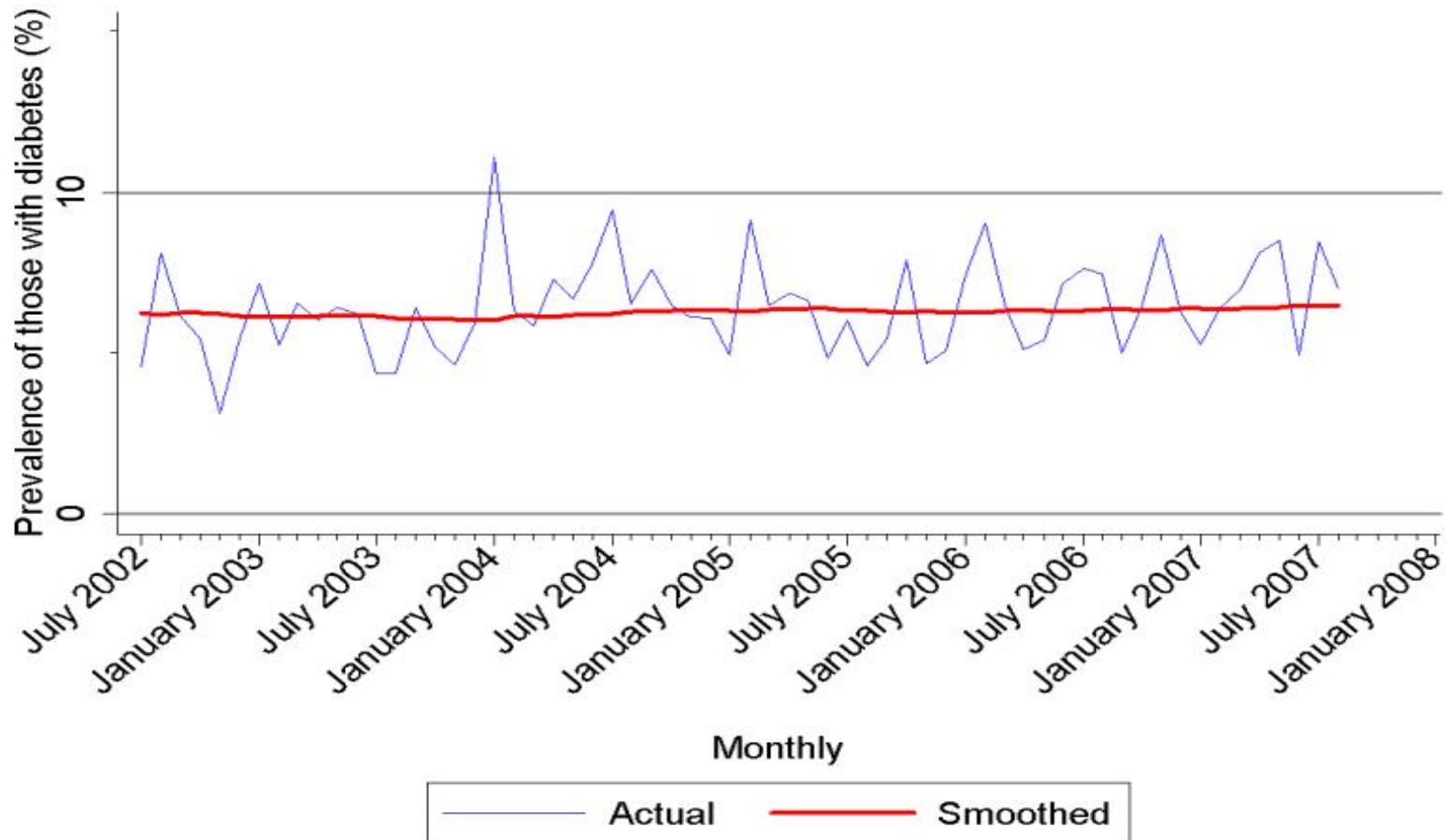


# CVD by obesity



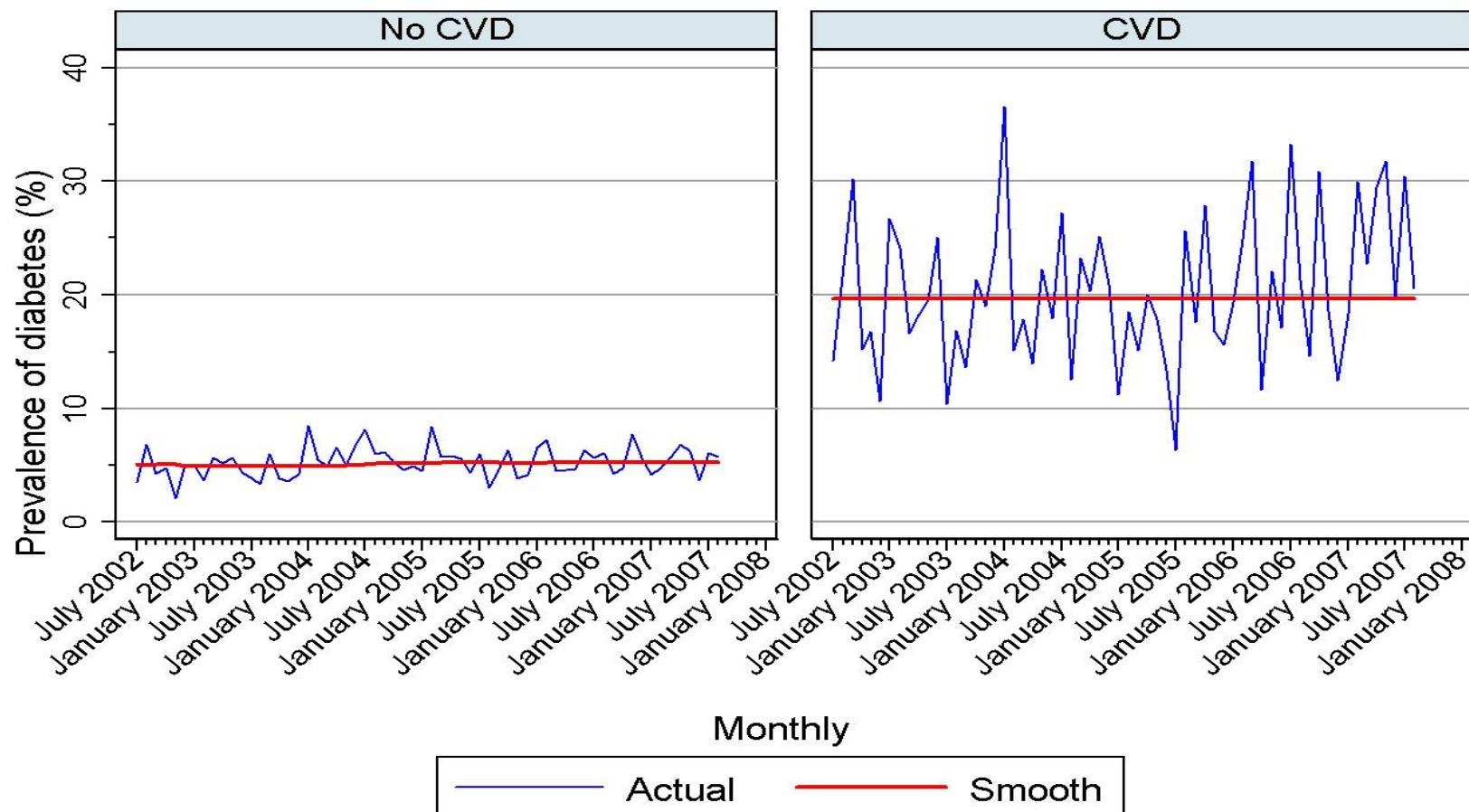
Data source: SAMSS July 2002 to August 2007. No significant trend for no obesity or obesity, exponentially smoothed

# Diabetes over time



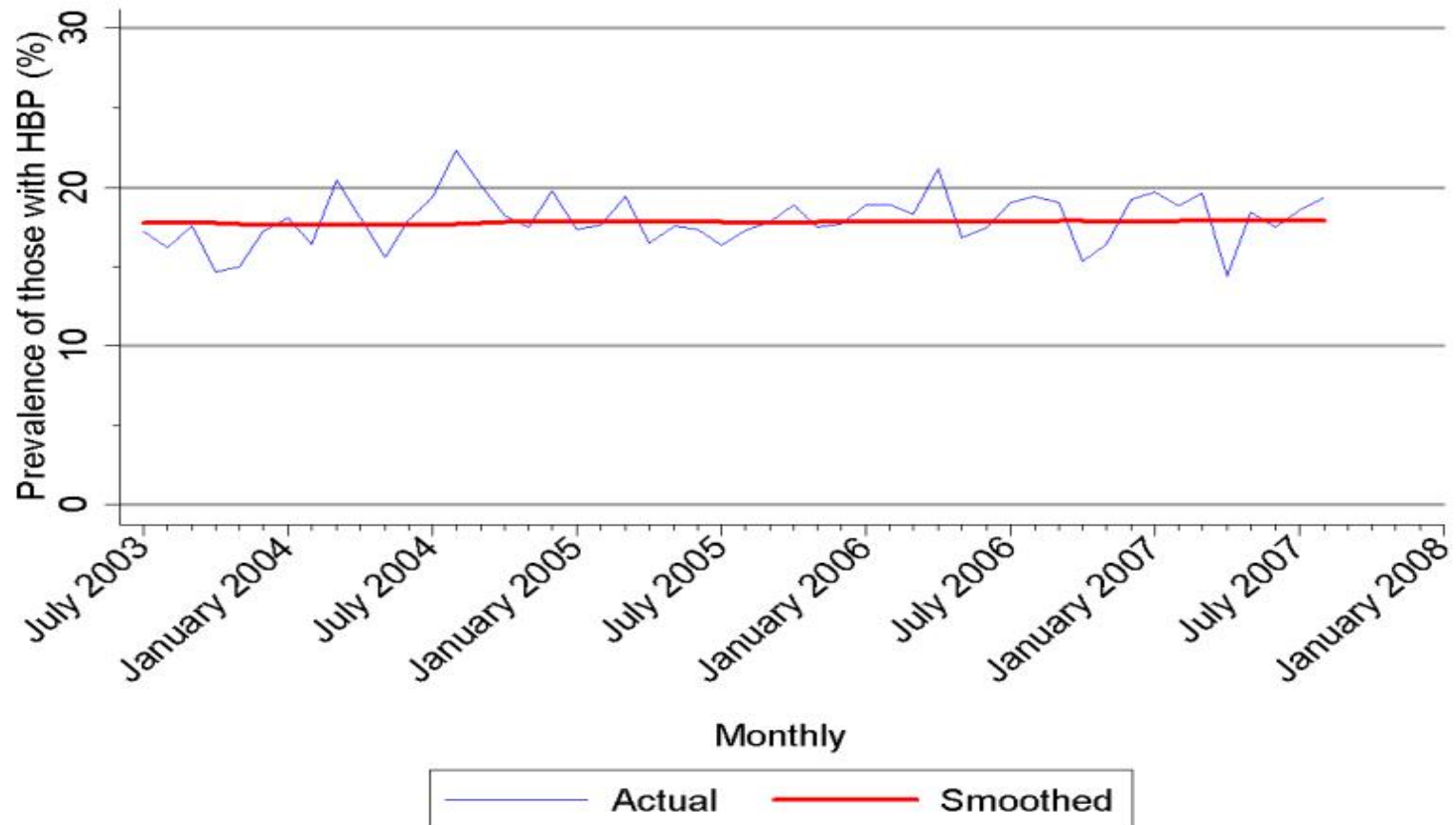
Data source: SAMSS July 2002 to August 2007. No significant trend, exponentially smoothed

# Diabetes and CVD



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

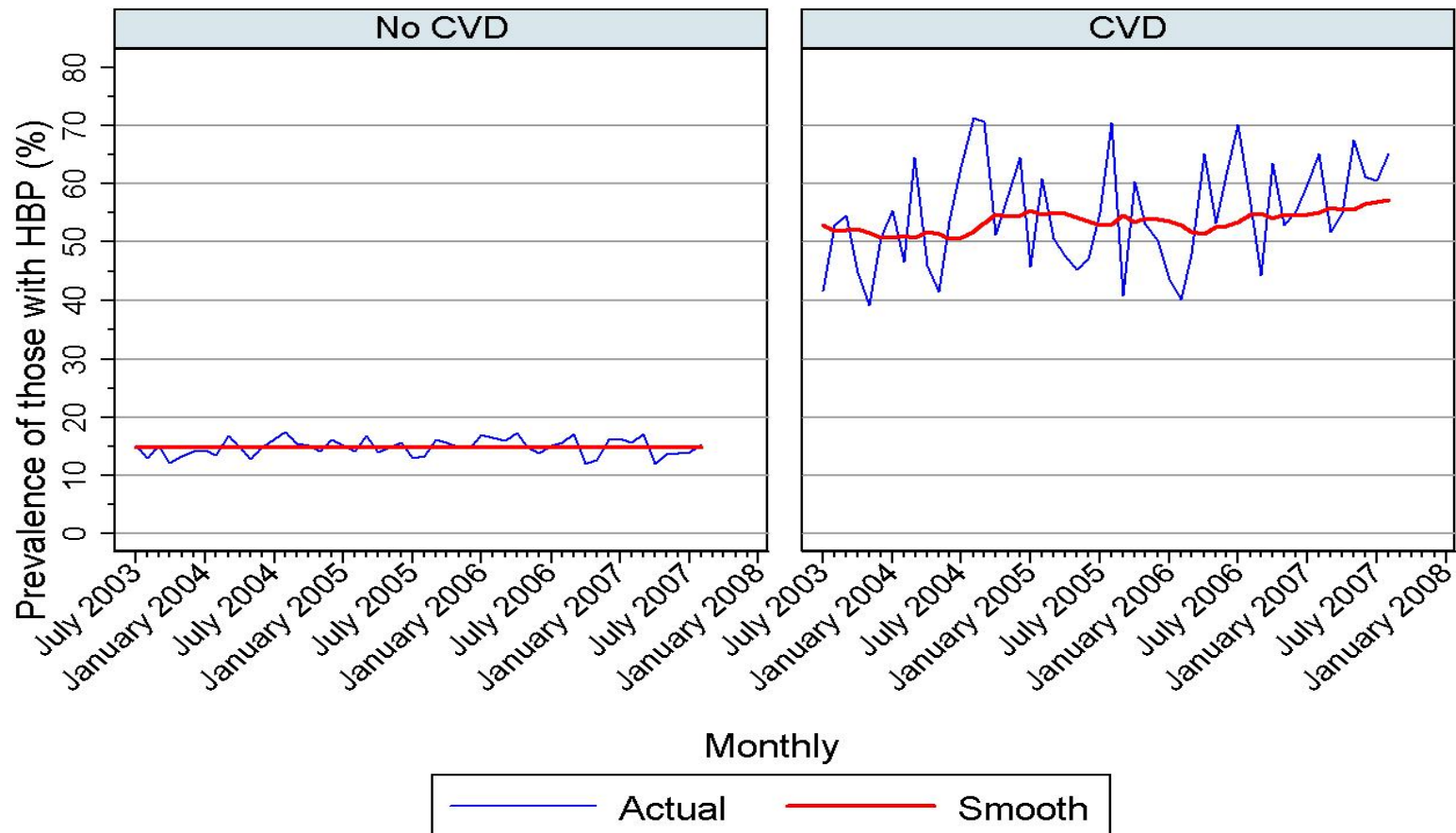
# HBP over time



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

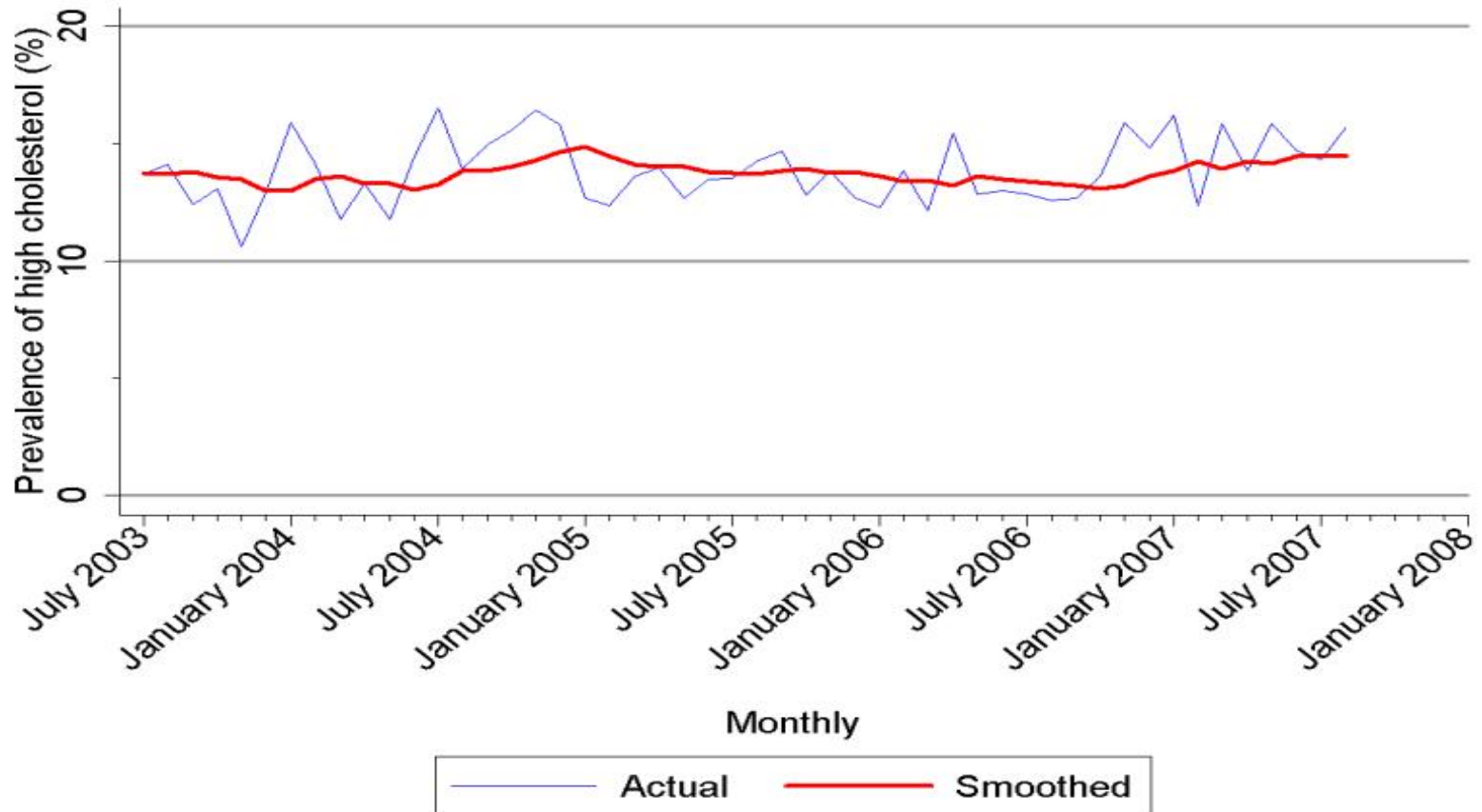


# HBP and CVD



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

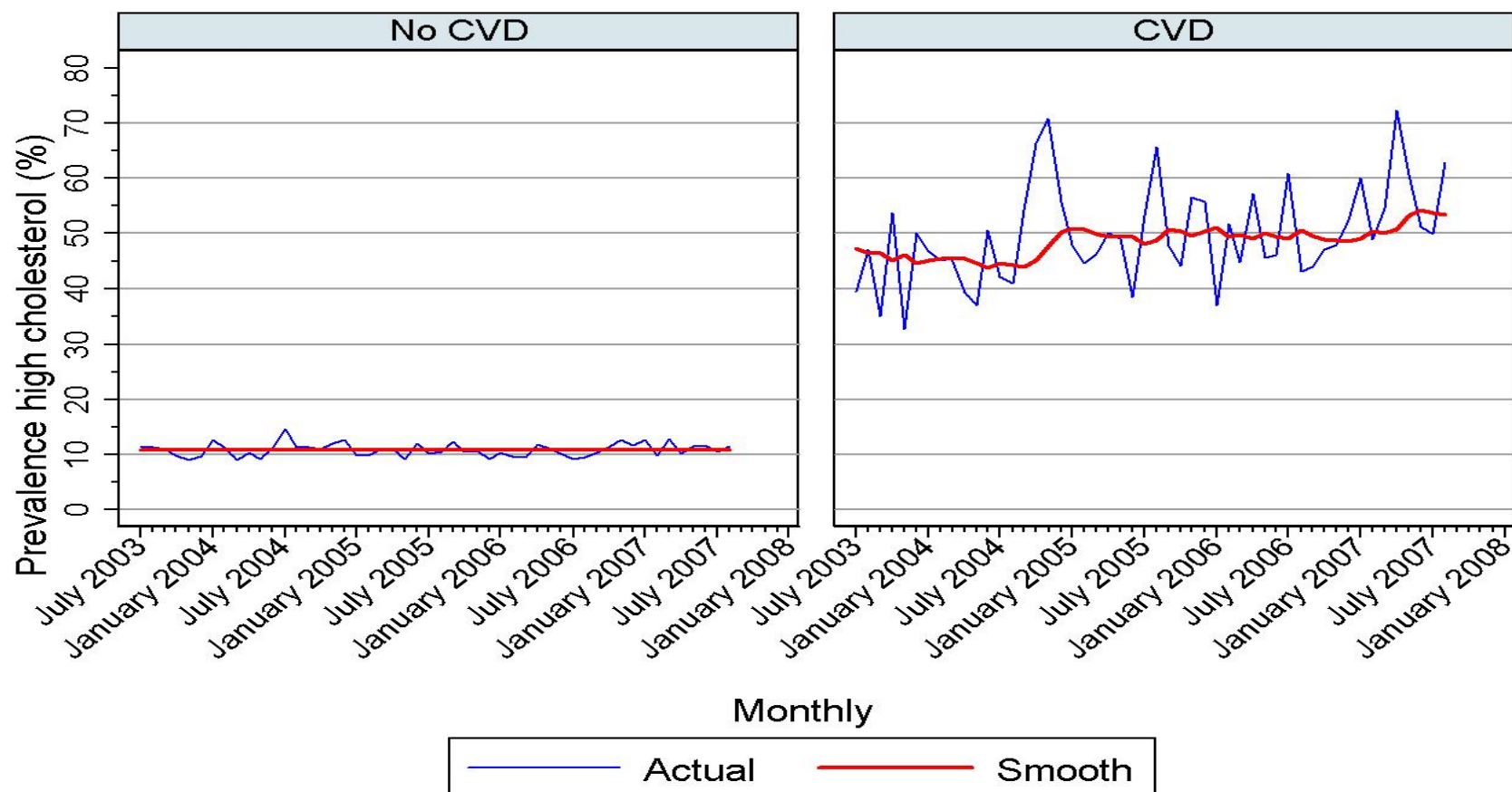
# High cholesterol over time



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.



# Contact details

Population Research and Outcome Studies  
Unit

South Australian Department of Health

Website

<http://www.health.sa.gov.au/pros>



# Thank you!

