

# Open Comparisons 2009

*Public Health (including the indicator Smoking habits)*



Public Health 2009

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## SUMMARY

# Open Comparisons 2009 Public Health

**OPEN COMPARISONS 2009 – PUBLIC HEALTH** highlights similarities and differences between municipalities and between county councils in Sweden. For example, we see relatively large differences between municipalities regarding living habits such as physical activity and consumption of fruits and vegetables. Different county councils have reported major differences in chlamydia cases among young people and in the number of expectant mothers who smoke.

Relatively large differences are apparent between the sexes in areas such as eating habits, in which more women than men eat the recommended amount of fruits and vegetables according to the National Food Administration. We also see gender differences in certain health conditions; for example, men suffer a larger degree of heart attacks, policy-related avoidable mortality (for example, resulting from motor vehicle accidents) and lung cancer. Boys are treated at hospitals more often than girls, due to accidents. Falls are more common among women than men. Women

have a higher average life expectancy than men. Differences between the sexes are also apparent in terms of social activities; women are more active socially than men. A larger proportion of women than men describe themselves as afraid to go out alone for fear of attack.

From an equity perspective most of the variables we have investigated show that people with a higher level of education have greater advantages. However, this does not include mental wellbeing and risky alcohol habits.

This is the first report of open comparisons in the public health field. It was generated through a collaboration between the Swedish Association of Local Authorities and Regions (SALAR), the National Board of Health and Welfare (NBHW) and the Swedish National Institute of Public Health (SNIPH). By providing comparisons of a number of important indicators of public health on the municipal and county council levels, Open Comparisons 2009 – Public Health aims to provide greater transparency into what municipalities and county councils achieve, and also to stimulate improvement efforts. However, many other players are responsible for trends in public health in addition to the municipalities and county councils/regions, and it may prove difficult to demand responsibility from an individual municipality or county council. The public health situation is also affected by structural factors such as age distribution, education and employment in the population; these factors are often difficult to influence in individual municipalities/county councils. Yet municipalities and county councils are so important to public health that the authorities felt these open comparisons would still be useful. The hope is that they will continue to contribute to deeper discussion and analysis, which will help in setting priorities and developing public health measures on the local and regional levels. The report also aims to contribute to greater knowledge about what leads to good public health, and what county councils and municipalities can do to further improve it.

Public health work aims to promote good health and prevent illness. This means that we must influence factors that are important for health, sometimes long before it is possible to see results in perceived or documented health. When a long time passes between a measure and its results, it can be hard to relate the results back to a particular measure or a specific player. This report summarises both living conditions and living habits that are important to the general health condition of the population. Often we are asked for “health factors”, things that have a positive effect on health. This report aims to reflect this, although the data often reflect ill health rather than good health.

The indicators, which are based on data from registries and surveys, are described in terms of background, incidence and possible effects on public health. In addition the report describes the resources of municipalities and county councils – how these authorities can affect the indicators.

Some challenges for Open Comparisons 2009 – Public Health were clear at an early stage. One of the first challenges was being able to produce data from an equity perspective. Public health is by definition an expression of the health status of a population, taking into account levels of health and their distribution between social groups. We have worked with renowned researchers in the field and jointly

arrived at a distribution of data based on level of education – higher or lower. The ambition was to present all indicators from an equity perspective; however, the data do not allow such a division, so the final report shows only the county council level and is primarily based on surveys.

A second challenge is to report as many indicators as possible on the municipal level. Municipal survey data are based on four different population surveys: the national population survey, Hälsa på lika villkor (Health on Equal Terms) 2006–2008 (SNIPH, national data and data selected by the county councils themselves), Liv & hälsa (Life & Health) 2008 (the county councils in Uppsala, Sörmland, Västmanland, Värmland and Örebro), Folkhälsa i Skåne (Public-Health Survey in Skåne) 2008, (Region Skåne) and Hälsoenkät Stockholms län (Stockholm County Health Survey) 2006, (Stockholm County Council).

Parts of the NBHW registry statistics are also reported on the municipal level.

The report shows 21 indicators divided into three classes: living conditions, living habits and health effects. This division is debatable, not least because several of the indicators could easily fall under more than one of the headings.

The indicators are:

#### **LIVING CONDITIONS**

- Social participation
- Social support – reliance on others
- Secure environment
- Qualification for upper-secondary school

#### **LIVING HABITS**

- Physical activity
- Eating habits – fruits and vegetables
- Smoking habits
- Maternal smoking during early pregnancy
- Risky alcohol habits

#### **HEALTH EFFECTS**

- Self-assessed general state of health
- Mental wellbeing
- Average life expectancy
- Policy-related avoidable mortality
- Acute myocardial infarction (AMI)
- Lung cancer
- Injuries among children
- Falls among people aged 65 or older
- Induced abortion among teenagers
- Chlamydia in the ages 15 to 29
- Obesity
- Dental health

The report also relates background factors that are important for analysing the results, as they reflect key conditions for good public health.

Data are presented in maps for municipal comparisons and in graphs for county council comparisons. In addition, total comparative data for the municipal and county council levels are presented in tables. Open Comparisons 2009 – Public Health follows the layout of previous reports for municipalities and county councils. On the municipal level the results for the individual indicators are divided up such that the 25% of municipalities with the best results are shown in green and the next 50% are shown in yellow. The 25% of municipalities with the poorest results are shown in red. On the county council level, the distribution is the top third of county councils in green, the middle third in yellow and the bottom third in red. Data from the report are also presented in various Swedish databases.

## Smoking habits

Smoking is the single greatest risk factor for illness and premature death in the developed world today. In Sweden about 7,000 people a year die of smoking-related illnesses, although there has been a positive trend as the number of smokers has decreased. Cigarette smoke contains more than 4,000 chemical substances, at least 50 of which are carcinogenic. Smoking affects nearly every organ of the body, and people subjected to second-hand smoke are also at risk. About 90% of all lung cancer cases and 20% of cardiovascular disease cases are believed to be due to smoking. Smokers are also more likely to use other drugs, such as alcohol. Financial calculations show that a single smoker costs society SEK 1.2 million more than a non-smoker during his or her lifetime, calculated in the form of net costs for health care, sickness benefits, early retirement and care of the elderly (30). Three of four adult smokers want to quit smoking, and many want professional help (31). Today there are many effective and cost effective methods of smoking cessation, but they are in insufficient supply. A doctoral thesis from Umeå University shows that it is possible to prevent tobacco use among young people through joint support from school and parents (32).

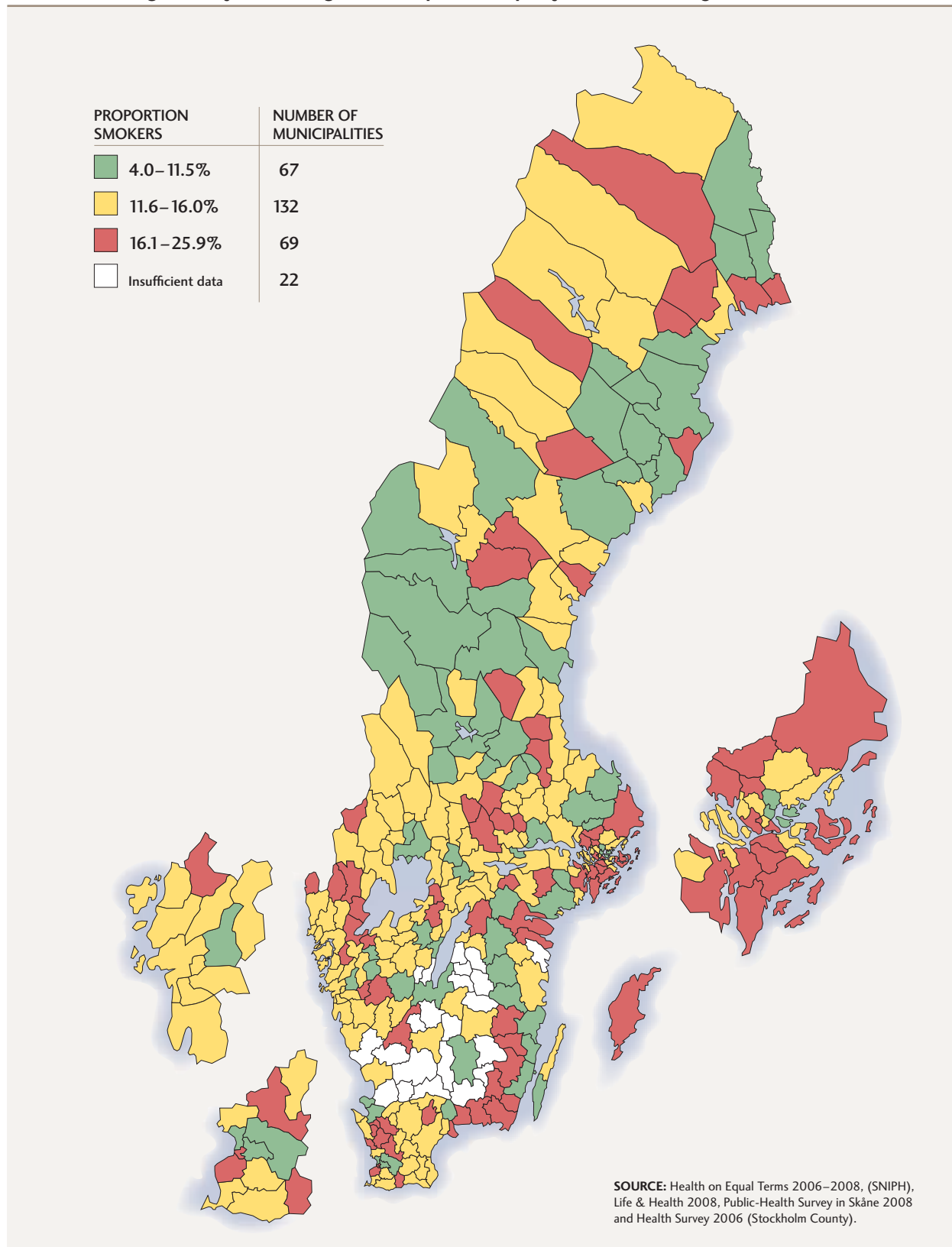
It is unusual that young people start smoking after age 19. This is why preventive work is so important at an early age. Child care and schools have a particularly important role in prevention of tobacco use. Other important efforts from the municipality's side include making sure that the tobacco laws are followed in terms of sales restrictions and bans on smoking in places of business. Establishing municipal action plans, collaborating with other players such as study associations, sports clubs and volunteer organisations, employment agencies and so on, also helps with tobacco prevention.

Providing information on the harmful effects of tobacco and offering support to patients and expectant parents for smoking cessation, both in general health care and prior to surgery, are tasks that the county councils carry out. Studies show that smokers have a greater risk of complications in connection with appendix and hernia operations, among others. Offering support in smoking cessation a few weeks before an operation can reduce that risk of complications (33). Other measures being conducted in the county councils include creating an action plan to promote a tobacco-free staff.

All four of the population surveys – Health on Equal Terms 2006–2008 (SNIPH), Life & Health 2008, Public-Health Survey in Skåne 2008 and Stockholm County Health Survey 2006 – have a question about daily smoking. This indicator is shown as a percentage of daily smokers per gender on the municipal and county council levels and divided up by level of education. (There is no division per level of education for the county councils of Halland and Kronoberg due to insufficient data.)

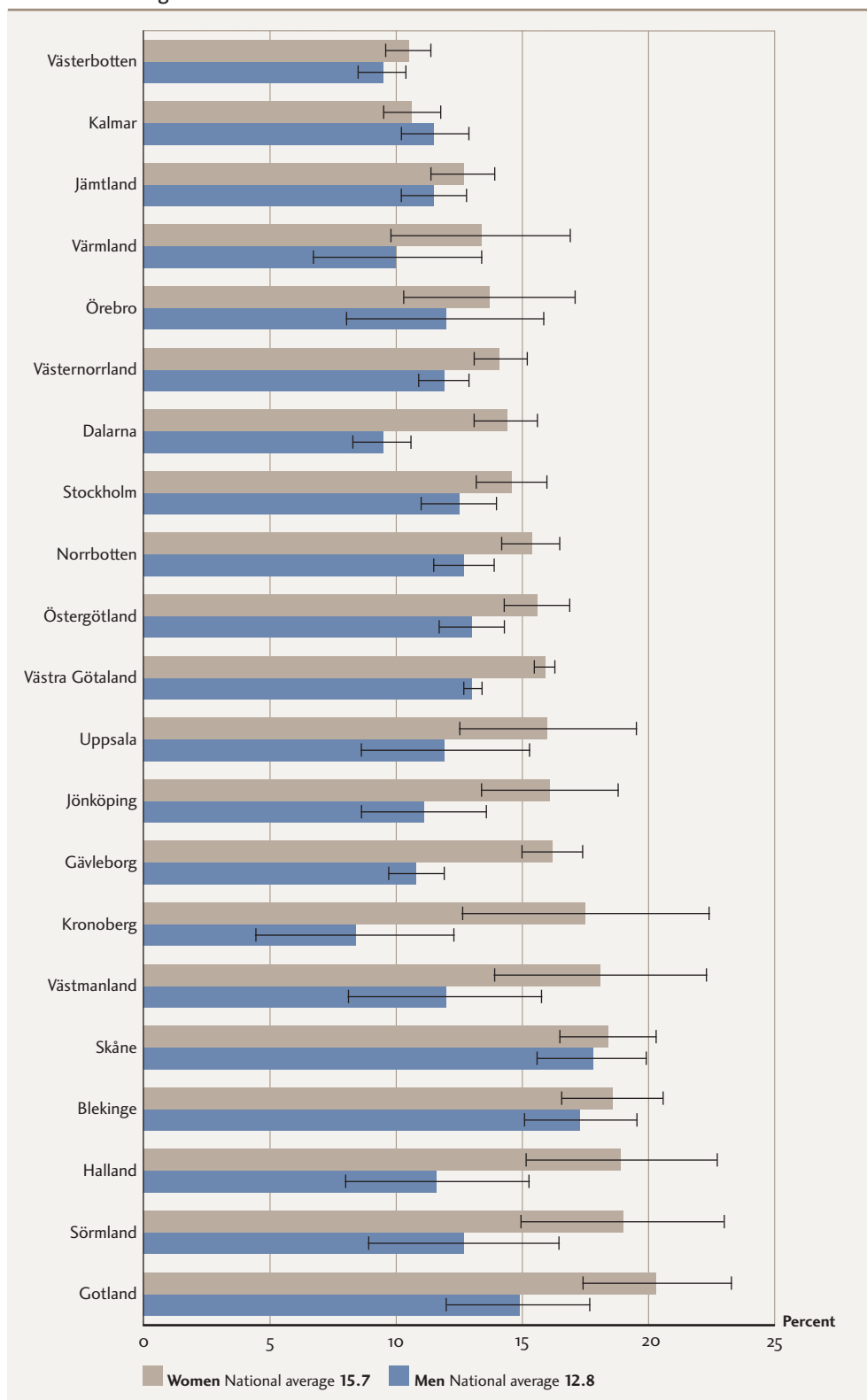
The results show that a greater proportion of women smoke than men. The number of daily smokers is higher among people with a lower level of education than among those with a higher level.

**MAP 4. Percentage of daily smokers aged 18–80, per municipality, 2006–2008. Age-standardised values.**



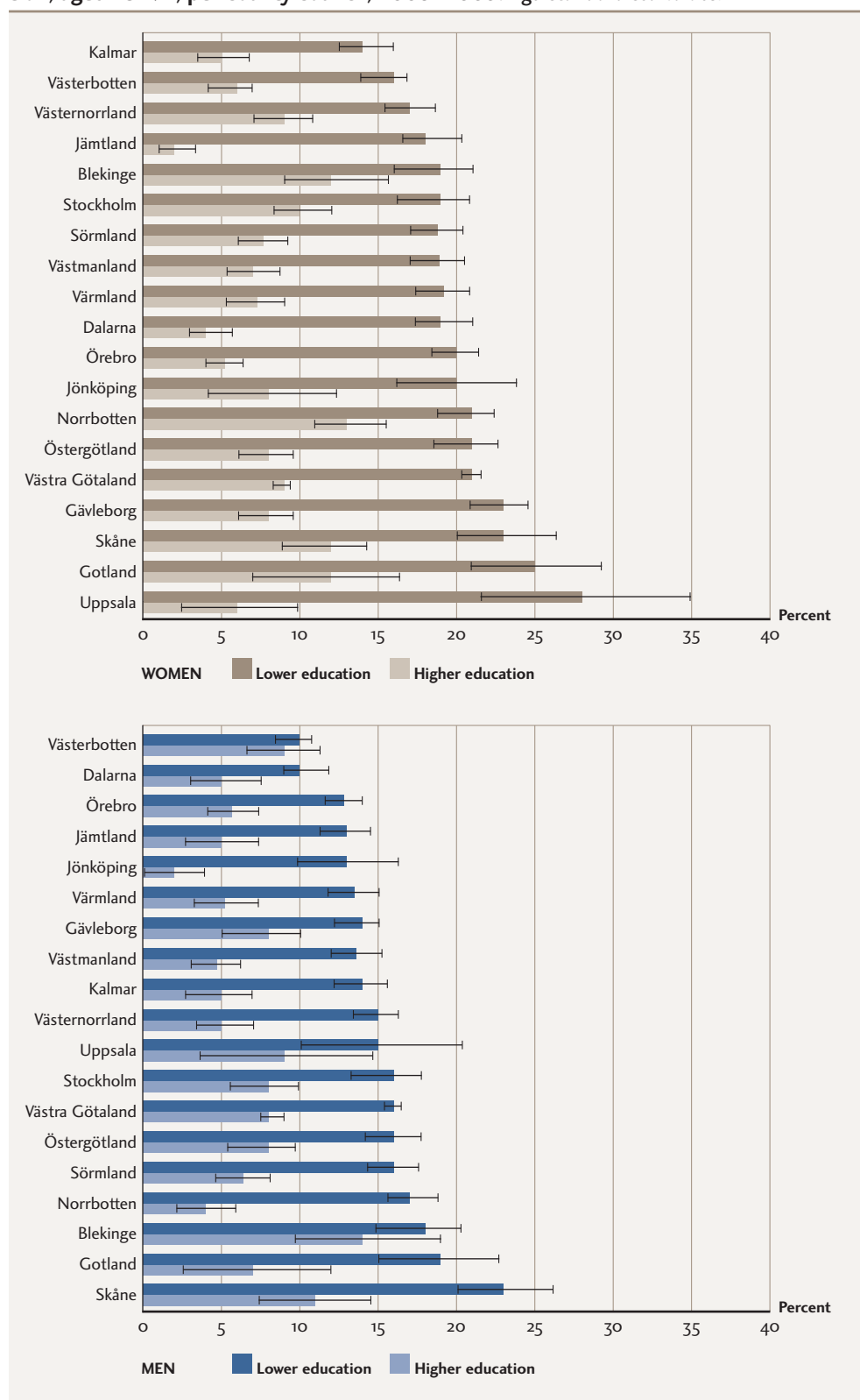


**DIAGRAM 12.** Percentage of daily smokers aged 18–80, per county council and gender, 2006–2008. Age-standardised values.



SOURCE: Health on Equal Terms 2006–2008 (SNIPH).

**DIAGRAM 13.** Percentage of daily smokers, women and men with low or higher education, aged 25–74, per county council, 2006–2008. Age-standardised values.



SOURCE: Health on Equal Terms 2006–2008 (SNIPH), Life & Health 2008.

## Comparisons between municipalities.

For precise definitions and sources, please see the individual indicators and the Description of Indicators appendix.

Municipality	Smoking habits								
	Percentage daily smokers aged 18–80, 2006–2008								
	Total			Men			Woman		
		Confidence interval			Confidence interval			Confidence interval	
Nationwide	14.4	14.2	14.5	12.8	12.5	13.1	15.7	15.4	15.9
Ale	15.5	13.4	17.6	14.0	11.0	16.9	16.8	13.9	19.8
Alingsås	13.0	10.8	15.2	10.0	7.0	13.0	15.3	12.1	18.4
Alvesta									
Aneby									
Arboga	12.5	8.7	16.3	13.2	7.0	19.4	12.2	7.6	16.8
Arjeplog	11.9	7.7	16.0						
Arvidsjaur	13.4	9.2	17.6	9.2	4.0	14.5	17.0	10.7	23.3
Arvika	12.5	8.9	16.1	11.0	6.1	15.8	13.8	8.5	19.1
Askersund	13.8	10.7	16.9	10.3	6.1	14.5	16.9	12.5	21.4
Avesta	11.7	8.6	14.8	15.4	10.2	20.6	8.6	4.9	12.3
Bengtstors	16.1	13.9	18.3	14.2	11.1	17.2	17.8	14.6	21.0
Berg	10.6	7.8	13.3	9.1	5.1	13.0	11.7	7.9	15.6
Bjurholm	7.5	4.7	10.2	3.4	0.7	6.1	11.5	6.7	16.3
Bjuv	16.6	12.6	20.6	12.2	7.2	17.1	20.3	14.1	26.5
Boden	16.3	13.7	19.0	10.1	6.9	13.3	21.3	17.4	25.3
Bollebygd	16.6	13.1	20.1	16.2	10.9	21.4	17.0	12.3	21.7
Bollnäs	13.5	10.8	16.2	16.9	12.5	21.3	10.8	7.5	14.1
Borgholm	12.5	8.3	16.8	6.4	1.9	10.9	18.1	11.3	24.9
Borlänge	10.9	8.9	13.0	15.0	11.5	18.6	7.7	5.4	10.1
Borås	18.3	16.1	20.5	14.9	12.0	17.9	21.4	18.2	24.6
Botkyrka	21.6	18.4	24.7	22.8	18.0	27.6	20.6	16.4	24.8
Boxholm									
Bromölla	13.6	9.6	17.7	10.4	5.4	15.4	16.5	10.3	22.7
Bräcke	17.5	14.1	20.8	21.5	16.2	26.8	13.9	9.8	18.1
Burlöv	16.5	12.7	20.3	15.7	10.5	20.9	16.9	11.4	22.3
Båstad	11.4	8.0	14.8	9.6	5.1	14.1	13.0	7.9	18.0
Dals-Ed	16.6	14.4	18.8	15.1	12.0	18.2	17.9	14.7	21.0
Danderyd	10.7	8.5	13.0	9.2	6.0	12.3	11.9	8.8	15.1
Degerfors	12.7	9.8	15.6	9.1	5.3	12.8	16.8	12.2	21.3
Dorotea	13.4	9.9	16.9	16.0	10.5	21.4	11.0	6.5	15.5
Eda	17.4	13.2	21.6	14.8	9.1	20.4	20.2	14.3	26.1
Ekerö	12.6	10.2	14.9	11.0	7.7	14.3	13.8	10.5	17.1
Eksjö									
Emmaboda	16.6	11.4	21.8						
Enköping	13.5	10.7	16.4	12.9	8.6	17.3	13.9	10.1	17.7
Eskilstuna	14.7	12.9	16.4	15.2	12.6	17.9	14.2	12.0	16.4
Eslöv	17.7	14.9	20.5	14.9	11.2	18.6	21.6	17.3	25.9
Essunga	9.6	7.2	12.1	11.6	7.8	15.4	7.8	4.7	10.8
Fagersta	12.8	9.1	16.6	11.2	6.1	16.4	14.9	9.3	20.4
Falkenberg									
Falköping	14.6	12.0	17.1	13.4	9.8	17.0	15.6	12.0	19.2
Falun	11.3	9.4	13.1	4.3	2.5	6.0	16.7	13.8	19.6
Filipstad	15.6	10.7	20.4	12.1	5.3	19.0	19.8	12.9	26.7
Finspång	9.8	6.4	13.3	10.2	4.8	15.5	9.6	5.2	14.1

**NOTE:** The table shows an excerpt of 44 out of a total of 290 municipalities.

## Comparisons between county councils and regions.

For precise definitions and sources, please see the individual indicators and the Description of Indicators appendix.

County councils	Smoking habits								
	Percentage daily smokers aged 18–80, 2006–2008								
	Total			Men			Women		
	Confidence interval			Confidence interval			Confidence interval		
<i>Nationwide</i>	14.4	14.2	14.5	12.8	12.5	13.1	15.7	15.4	15.9
Stockholm	13.7	12.7	14.7	12.5	11.0	14.0	14.6	13.2	16.0
Uppsala	14.1	11.7	16.6	11.9	8.6	15.3	16.0	12.5	19.5
Sörmland	16.2	13.4	19.0	12.7	8.9	16.5	19.0	15.0	23.0
Östergötland	14.4	13.5	15.3	13.0	11.7	14.3	15.6	14.3	16.9
Jönköping	13.8	12.0	15.7	11.1	8.6	13.6	16.1	13.4	18.8
Kronoberg	13.4	10.1	16.6	8.4	4.5	12.3	17.5	12.6	22.4
Kalmar	11.1	10.2	11.9	11.5	10.2	12.9	10.6	9.5	11.8
Gotland	17.8	15.8	19.9	14.9	12.0	17.7	20.3	17.4	23.3
Blekinge	18.0	16.5	19.5	17.3	15.1	19.5	18.6	16.6	20.6
Skåne	18.1	16.7	19.5	17.8	15.6	19.9	18.4	16.5	20.3
Halland	15.9	13.2	18.6	11.6	8.0	15.3	18.9	15.2	22.7
Västra Götaland	14.6	14.3	14.9	13.0	12.7	13.4	15.9	15.5	16.3
Värmland	11.8	9.3	14.2	10.0	6.7	13.4	13.4	9.8	16.9
Örebro	13.0	10.4	15.6	12.0	8.0	15.9	13.7	10.3	17.1
Västmanland	15.3	12.4	18.2	12.0	8.1	15.8	18.1	13.9	22.3
Dalarna	12.2	11.3	13.0	9.5	8.3	10.6	14.4	13.1	15.6
Gävleborg	13.7	12.9	14.5	10.8	9.7	11.9	16.2	15.0	17.4
Västernorrland	13.1	12.3	13.8	11.9	10.9	12.9	14.1	13.1	15.2
Jämtland	12.1	11.2	13.0	11.5	10.2	12.8	12.7	11.4	13.9
Västerbotten	10.0	9.3	10.7	9.5	8.5	10.4	10.5	9.6	11.4
Norrbottn	14.2	13.3	15.0	12.7	11.5	13.9	15.4	14.2	16.5

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## Sweden's democratic system

### Three democratic levels

Sweden is divided into 290 municipalities, 18 counties and two regions (Västra Götaland and Skåne). There is no hierarchical relation between municipalities, counties and regions, since all have their own self-governing local authorities with responsibility for different activities. The current Local Government Act defines the roles of municipalities, county councils and regions as follows:

- Municipalities are responsible for matters relating to the inhabitants of the municipality and their immediate environment.
- The main task of the county councils and regions is healthcare.
- The Swedish Parliament, or Riksdag, is the supreme political decision-making body in Sweden.

Local government has a long tradition in Sweden. Municipalities, county councils and regions are responsible for providing a significant proportion of all public services. They have a considerable degree of autonomy and have independent powers of taxation.

### The role of the municipalities

Sweden's 290 municipalities are responsible for a larger share of public services in comparison with the situation in most other countries. For example the municipalities are responsible for social services, childcare and preschools, elderly care, primary and secondary education, planning and building issues, health and environmental protection, emergency services and emergency preparedness.

### The activities of the county councils and regions

The activities of Sweden's 18 county councils and two regions cover two main areas: healthcare and regional development. The activities include primary care for everyone with health problems, county and regional healthcare, dental care and regional activities.



## Open Comparisons 2009

### Public Health

**THIS IS A TRANSLATED EXCERPT** from the first report on open comparisons in the public health field, *Öppna jämförelser 2009 – Folkhälsa*. The main report is the first step in a more long-term improvement effort. It compares indicators related to living conditions, living habits and health effects on the municipal and county council levels. Municipalities and county councils are responsible for many issues related to health determinants and public health. The indicators are presented on maps for the municipal level and graphs for the county council level. Some indicators are also shown on the county council level for different levels of education. The table appendix to the report shows the values and ranking of the various indicators for municipalities and county councils as well as background variables, which are not ranked.

This excerpt contains the summary of the main report and all information on one of the indicators, smoking habits.

The health situation in Sweden in general is very good. By offering the opportunity to make comparisons in the public health field, we hope to stimulate analysis, discussion and further improvements.



You can order a copy of the main report, *Öppna jämförelser 2009 – Folkhälsa*, at [www.skl.se/publikationer](http://www.skl.se/publikationer)  
Price: SEK 100 exclusive of VAT, postage and service charge.

You can also download a copy of the report in PDF format (Swedish) from  
Swedish Association of Local Authorities and Regions: [www.skl.se/publikationer](http://www.skl.se/publikationer)  
National Board of Health and Welfare: [www.socialstyrelsen.se/publikationer](http://www.socialstyrelsen.se/publikationer)  
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