

STRAMA

**The Swedish Strategic
Programme for the Rational
Use of Antimicrobial Agents**

**Annual Report
2005**

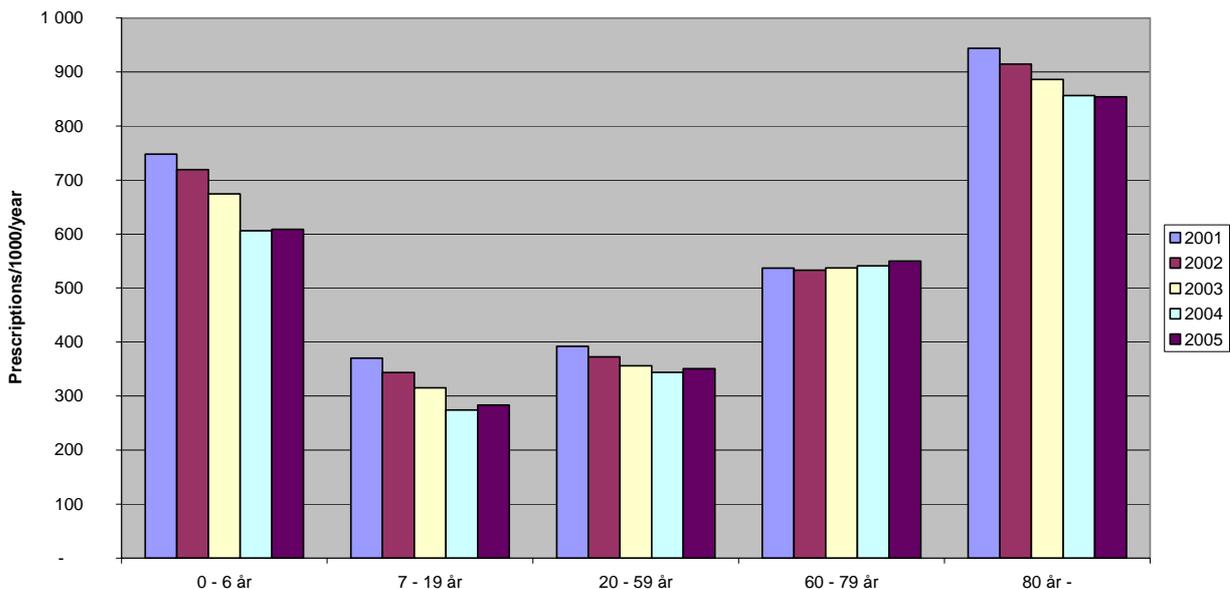
STRAMA's remit

As part of the agreement on healthcare funding between the state and the Association of County Councils, STRAMA, the Swedish Strategic Programme for the Rational Use of Antimicrobial Agents and Surveillance of Resistance, received eight million SEK for 2005. The remit specifies the need for increased knowledge and awareness of the problems of antibiotic resistance and for a preventative approach. The funds have been split between management functions and projects at national and local level. 2005 was STRAMA's tenth year of activity, which was marked with, amongst other events, an international scientific symposium. During the year, the government put forward a proposal "A Strategy for a Coordinated Approach to Antibiotic Resistance and Healthcare-related Illnesses". This suggested an approach that corresponds well with the approach that has been adopted by STRAMA.

Trends in antibiotic consumption and resistance

The consumption of antibiotics in the younger age groups remained at a low level during 2005, whilst a small increase was seen in the older age groups. Changes in the recommended doses of certain antibiotics were introduced during the year, which may partly explain why total consumption is essentially unchanged from 2004. The latest Nordic summary, however, shows that Sweden, in this comparison, has the lowest antibiotic prescribing.

Consumption of antibiotics in the community, J01 excl methenamine, 2001-2005, various age groups, Prescriptions/1000 inhabitants and year.



In collaboration with the Swedish Institute for Infectious Disease Control, STRAMA also monitors the development of resistant bacteria. Although resistance levels are low in Sweden, a worrying increase in MRSA incidence is discernible. 1 007 cases were reported in 2005 – an increase of 42%. The number of cases of penicillin-resistant pneumococci reported under notifiable disease legislation was, on the other hand, largely comparable to 2004 (669 and 649 respectively).

During the year, STRAMA and the Institute for Infectious Disease Control presented their fourth joint annual report on antibiotic sales and resistance patterns in Sweden. The report, *Swedres 2004*, was once again made in conjunction with its veterinary equivalent, *Svarm 2004*. The report is primarily aimed at the Swedish healthcare system, but it also contributes to increasing international awareness of the Swedish approach to the monitoring of data, continuous intervention and contingency planning.

Management functions

The National STRAMA group

STRAMA's national management board held two meetings during the year. This is the decision-making body that sets the organisation's priorities and distributes the available funding. This body has also prolonged the overall management responsibility given to the chairman. Day-to-day management is carried out by STRAMA's central office and by the executive committee (EC). During the year, activities have been divided into nine sections, each with a section lead and with defined aims and activities.

Central functions

To mark STRAMA's tenth anniversary, an international scientific symposium was held under the title "Antibiotic resistance – present situation and future perspectives". European researchers reported on antibiotic use and resistance development from different perspectives. Representatives from the EU, ECDC and WHO presented their planned programmes of action. The meeting attracted two hundred participants. The anniversary was commemorated in a book that gave an account of STRAMA's first ten years. Written contributions from several workers described the last ten years from a personal as well as a broad perspective.

Towards the end of the year, a questionnaire was sent to the local STRAMA groups. A summary of the responses is being prepared and will form the basis for future support for local activities.

Community care

During one week in November, infection, diagnosis and prescription registration was carried out in primary care in seven counties. With this study, STRAMA now has data from more than 19 000 patient cases collected on three separate occasions. The results of the third study are being prepared. The first two studies have shown significant changes in prescribing patterns in line with STRAMA's aims.

The WHO has established the diagnostic coding system, ICD-10, which is used in the Swedish health-care system. Standardised definitions of these codes are needed in order to make it easier to draw comparisons. STRAMA has therefore initiated such a project for infection diagnoses.

The risks of under-treatment and complications have been discussed in the context of the reduced use of antibiotics. STRAMA has therefore, in collaboration with the Swedish Board of Health and Welfare, studied the number of children admitted to hospital with certain infection diagnoses and compared the trends with trends in antibiotic consumption. A preliminary analysis of the material did not suggest increased rates of illness. Further statistical analyses will be made during 2006.

Two expert meetings have been arranged in collaboration with the Medical Products Agency. New treatment guidelines have subsequently been presented for rhinosinusitis and for the use of erythromycin in pregnancy.

Hospital care

Hospital-based point prevalence studies were carried out in 2003 and 2004. The aim of these studies was to document the use of antibiotics in Swedish hospitals. The analysis identified three areas in which prescribing patterns and indications could be improved. Against this background, a secondary care network, STRAMA-S, was established during the year. The network's steering group has adopted a proposed programme that has the aim of working for the rational use of antibiotics and reduced resistance as an integral component of improved patient safety and quality of care. The group's remit is to actively support local activity by the dissemination of knowledge, interventions and research.

In a qualitative interview study, twenty specialist doctors in general surgery, urology and general medicine were invited to give their opinion as to whether or not antibiotic resistance is a problem. The distribution of the doctors' responses according to a scale from "unproblematic in practice and not a worrying development" to "problematic in practice and a worrying development" could be seen. One

of the conclusions was that attitudes to resistance can influence willingness to adopt new treatment guidelines.

Intervention and qualitative studies

Public awareness of antibiotics and resistance is poorly documented. For this reason, STRAMA planned telephone interviews with 1 000 people (a statistical selection from the national personal address database (SPAR), and a questionnaire was prepared during the year. The telephone interviews will be carried out in January – March 2006.

Monitoring foreign scientific publications

Scientific literature relevant to antibiotics is continually monitored. Important studies of consumption patterns, treatment protocols and the development of resistance are referenced and commented upon in STRAMA's newsletter, which was published six times during 2005.

Clinical trials

We don't know enough about many of the available antibiotics to be able to determine how best to use them. The pharmaceutical industry has shown little interest in financing studies that can answer these important clinical questions, and the interest in questions concerning old drugs is entirely non-existent. Against this background, STRAMA has decided to carry out a clinical trial of the length of treatment required in acute pyelonephritis. The trial is being conducted in collaboration with Uppsala Clinical Research Centre and is funded by STRAMA without any financial contribution from the pharmaceutical industry or other organisations. Extensive preparatory work has been carried out during the year. About 20 clinics will be taking part in the study which is to start early in 2006.

Hygiene in healthcare

On the initiative of the chairman of STRAMA, a national group focused on hygiene in healthcare was established in 2003. In addition to STRAMA, the group includes representative from the Board of Health and Welfare and the Swedish Association for Healthcare Hygiene. The past year has seen the completion of a study to establish parameters that can be used to evaluate hand disinfection. The results of the study were presented at the annual international conference on infectious diseases.

Iva-STRAMA

STRAMA has been conducting a project within intensive care since 2000. This project was split into two parts during 2005. One part of the project was integrated with the Swedish Intensive Care Register (SIR), a development that provided a better opportunity for patient-based follow-up. The other part is to become part of an EU-project, Improving Patient Safety in Europe (IPSE), which will enable international comparisons to be made.

Local groups

One million SEK out of the annual budget has been allocated to support local projects throughout the country. The aims of these projects range over a wide spectrum and some examples are listed below:

- The translation into Arabic and Serbo-Croat of educational material about nursery school infection, intended for staff and parents in nursery schools with a high proportion of immigrants
- Antibiotic prescribing in pre-school children in Malmö
- Organisational models for carrying out county-wide infection control
- Improved diagnostics in urinary tract infection in nursing home patients
- Hygiene rounds in local authority residential homes
- Vancomycin resistant enterococci in hospital and community care
- The education of nurses in local authority and private residential homes for the elderly in South-west Skåne
- Perinatal infections caused by group-B streptococci (GBS) – a national survey of the prevalence of GBS colonisation in pregnant women and the newborn
- CRP levels in pre-school children with uncomplicated airway infection

Other projects

During the year, amendments made to hygiene protocols in nursery schools have been studied. Can alcohol gel hand disinfection reduce infection and transmission rates compared to traditional hand washing? The results of the study will become available during the spring of 2006.

STRAMA has also previously carried out studies of infection in pre-school children. The results of these studies were published during the year in the scientific press.

The Skåne local STRAMA group has, with the support of STRAMA, produced an educational film about infection in pre-school children. Demand for the film has been great, and it has been distributed to 300 nursery schools.

The "Trimethoprim Study" in Kronoberg County, initiated in 2004, is continuing. This study can, we hope, provide us with new knowledge about the possibility of reversing resistance.

Lectures and symposia

Members of STRAMA's national management board and executive committee have taken part during the year in several educational activities, e.g. the education days and courses held by the Institute for Infectious Disease Control and the Swedish Reference Group for Antibiotics. The past year has also seen local STRAMA groups, drugs and therapeutics committees, specialist medical associations and other networks invite STRAMA's chairman to give lectures and join discussion groups. Updates on antibiotic resistance patterns and consumption have been regularly provided to the media. STRAMA's point prevalence studies in secondary care were presented at this year's Läkarsamma (The Swedish Annual Medical Congress).

Other activities

STRAMA's web site is continually updated and is used with the help of news bulletin subscriptions to disseminate current information.

International activities

STRAMA has again this year participated in the EU-supported project "European Surveillance of Antimicrobial Consumption", ESAC. Sales statistics for antibiotics in primary and secondary care have been collated from several European countries since 1997. The results of the project have also been presented in scientific journals. STRAMA's studies in secondary care have attracted a great deal of interest in Europe, and this spring a new European study will be conducted by 20 participating hospitals. Halmstad County Hospital will be the Swedish representative. The study is being carried out as part of the ESAC project.

STRAMA was joint arranger when the REACT network held its second meeting in September with 63 participants from 23 countries from Asia, Africa, the Americas and Europe. The participation of e.g. government officials and representatives from China's Infection Control Agency, the WHO and Latin American networks for women's health meant that discussions were very broadly based.

Solna, April 2006

On behalf of the National STRAMA Group



Otto Cars
Chairman

Financial summary, STRAMA 2005

Item	Cost in tSEK
Overheads	1 040
Administration and IT	230
Salaries	1 336
Meetings, education days, travel	806
National studies and projects*	2 227
Local projects	965
Project support and analysis	793
Total	7 397

* Includes the studies:

Diagnosis/prescribing study in primary care

Antibiotic use in secondary care

Antibiotic use in intensive care

Hygiene conditions in nursery schools

Public awareness of antibiotics and resistance

Clinical trial to compare course lengths

Reversibility of resistance with changes in treatment

Översättning av bilderna:

TITELN

The Swedish Strategic Programme for the Rational Use of Antimicrobial Agents and Surveillance of Resistance

Heter STRAMA på engelska på webbsidan

Men jag har använt följande i brödtexten eftersom det är en mer exakt översättning:

Strategic Body for Rational Antibiotic Treatment and Reduced Antibiotic Resistance

Ni kan välja vilket som passar bäst, men det är nog bäst att rubriken och texten överensstämmer.

DIAGRAMMET

Consumption of antibiotics in the community, J01 excl. methenamine, 2001-2005, various age groups, annual number of prescription items per 1 000 population.

Source: Apoteket AB

Prescription items/1 000 population/year