



Schweizerisches Gesundheitsobservatorium
Observatoire suisse de la santé
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Swiss Health Observatory



Health in Switzerland National Health Report 2008

Summary

The Swiss Health Observatory (Obsan) is an organisational unit of the Federal Statistical Office, which emerged from the national Public Health Policy project and is commissioned by the government and cantons. The Health Observatory analyses the information available on health in Switzerland. It supports government, cantons and other institutions involved in public health with their planning, decision making and implementation. Further information is available at www.obsan.ch and www.nationalgesundheit.ch.

Health in Switzerland – National Health Report 2008.

Summary

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Introduction

The health of the Swiss population is changing continuously. Life expectancy is increasing; some diseases are occurring less frequently and others more. For politicians and other decision makers in the health system it is consequently necessary to obtain, from time to time, an overview of this development and to examine its causes. For this reason, the Confederation and the cantons assigned the Swiss Health Observatory the task of drafting a National Health Report. This report is intended to serve as a basis to propose improvements in preventive medicine and health care, to ensure that achievements are sustainable over the long term and to tackle new challenges.

In recent years, health care debates have often been premised on the assumption that many of the new chronic diseases are mainly caused by individual behaviour. The assumption was that whoever eats poorly or does not get enough exercise will fall ill and is ultimately personally responsible for his or her illness. But a growing body of research is clearly showing that an individual's health is also determined by external factors. These include socioeconomic factors such as education, occupation and income, as well as socio-cultural determinants such as sex, ethnic origin and social status. Therefore, how healthy a society is depends both on individual and on social conditions.

Identifying relationships

The “Health in Switzerland” report describes for the first time the health of the population in light of these social health determinants. Thus, Switzerland is, after Sweden and Finland, one of the first European countries to adopt this concept. This report is also founded on the conviction that health policy must do more than simply guarantee that people who are ill are cared for. Health policy should also contribute to creating the social conditions that will give as many people as possible access to the resources of the health care system. One of the aims is the reduction of health disparities.

This approach also means, however, that a health report such as the present one is more than simply a collection of data which describes the state of health of a particular society. It must also show how health and illness are distributed among different socioeconomic groups, separately for men and women and over the entire lifespan from childhood to old age. The “Health in Switzerland” report endeavours to do this by highlighting the health impact of determinants such as status, education and social resources, as well as the familial and social environment. It therefore underscores connections that should enable all actors in the health care system to develop approaches for future improvements.

The chapters of the Swiss Health Report are briefly summarized below. More detailed information can be found in the book *Health in Switzerland – National Health Report 2008* or on the www.obsan.ch website.

Part I: Health Determinants

The Concept of Health Determinants

In the past, two developments largely determined the standard of living and life expectancy of the Swiss population. First, improved living and working conditions in the late 19th and early 20th centuries resulted in a substantial increase in life expectancy. Second, during the 20th century people were given broad access to medical care. Both developments have ultimately proven to be significant achievements for society as a whole. They show that in addition to medical advances, social progress is also a major contributor to good health.

Social influences that have an impact on health are called social determinants. These include socioeconomic factors, environmental conditions and lifestyles, as well as individual preconditions such as age, sex or ethnic origin, which can have substantially different effects depending on the socio-cultural environment. The social conditions in which people live and work are not only partially responsible for the health of individuals but also for the state of health of entire population groups.

Education, Employment, Income and Environment

Education is one of the most important socioeconomic determinants of health. It is, in fact, a powerful predictor of good health. People with a lower level of education have a shorter lifespan and spend more of their lives with illness than people with a higher level of education. The relationship between income and health has by now been unequivocally established. People with lower income have a worse health and life expectancy than people with higher income. Moreover, their risk of suffering from a wide range of illnesses is many times higher. It is, therefore, not surprising that being one of the wealthiest countries and having a well developed education system, Switzerland has one of the highest life expectancies in the world.

Employment plays a major role in determining the health of all social strata. Workplace quality, occupational status and the concomitant social status exert a significant influence on the health risks of all income groups. People also face health problems when they are unable to work: the longer someone is unemployed, the more likely it is that he or she will fall ill.

The physical environment also shapes our health. Influencing factors such as air pollution, road traffic, unclean water and contaminated food have had a growing environmental impact in recent decades. It is significant, for example, that low-income people in particular live in urban districts that are exposed to more environmental pollution.

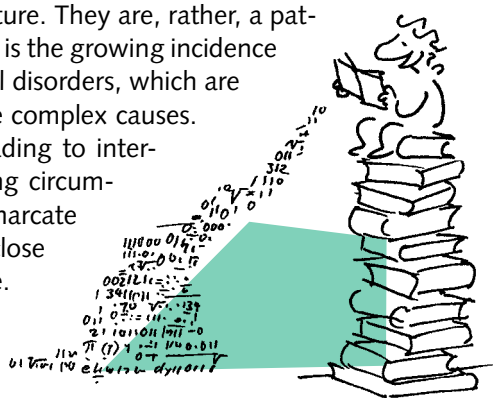
Supportive Health Resources

Health research is not only focused on determinants that cause illness. It also tries to understand the influences that keep people healthy. These salutogenic factors, as they are called, are determined by individual behaviour and characteristics as well as by the living environment. Individual resources include characteristics such as independence and self-esteem, as well as attitudes, knowledge, skills and social involvement.

These personal capacities begin to be developed during early childhood. It is therefore very important for children to be able to grow up in an intact social environment comprised, besides their own family, of friends and people they know and trust. An environment that promotes good health also consists of material opportunities. Families' material resources have a major impact on children's school performance and consequently also on their health and future prospects.

Interlinked Determinants

Social determinants should not be pictured as a rigid structure. They are, rather, a pattern that can change continuously. A striking illustration of this is the growing incidence of chronic diseases, such as diabetes, obesity and psychological disorders, which are shaped by the circumstances of modern life and tend to have complex causes. Individual health determinants also influence each other, leading to interactions between harmful health factors and health-promoting circumstances. Consequently, it is not always possible to clearly demarcate the various determinants. For example, there is frequently a close correlation between a low level of education and a low income. But this also shows that in their daily lives, socially disadvantaged people are particularly exposed to a combination of health determinants that can reinforce themselves negatively.



The concept of social determinants of health has taken on an increasingly distinct shape in recent years. But big challenges lie ahead. For example, how determinants interact with illness and good health is a question that needs to be researched more fully. In particular, this includes a deeper understanding of protective factors, especially during early childhood development and in the psychosocial sphere.

There is much we do not know yet, but research results published to date are sufficiently definite to take due account of and to coordinate preventive *conditions* and preventive *behaviour* from now on. This means that if we want to improve individuals' state of health, we should also factor in their living and working conditions. But research on social determinants has also clearly shown that good health is a matter of concern to all of society. Achieving good health is the responsibility of all political actors and decision makers. This entails a new and broader understanding of health policy.

Part II: A Healthy Life

Start of Life and Childhood

Impressive advances have been achieved in Switzerland in the medical care and treatment of infants and young children. Since the 1970s, this has resulted in a marked reduction in infant and child mortality. Today, there are only 4–5 deaths per 1000 live births. In international comparison, the general health of children in Switzerland is good.

But there are problem areas. Over the past 20 years, the number of overweight children has more than trebled and the number of obese children has increased six-fold. Violence against children presents a significant health risk. It is estimated that one in five girls and one in ten boys are victims of sexual violence before the age of 18. Chronic diseases are also on the rise. As in other European countries, the incidence of dental caries in deciduous and permanent teeth is also rising in Switzerland. Allergy-induced asthma, eczema, common colds and eye irritations are increasing worldwide, particularly among school-age children. And despite improved survival rates, cancers continue to be one of the most frequent causes of death in children.

Studies have shown that the foundation for a healthy lifestyle and good health during adolescence and adulthood is already laid during pregnancy and early childhood. Breastfeeding plays an important role in promoting good health. Childhood health problems, overweight and lack of physical activity can lead to chronic health complaints later on.

Early Childhood Risks



In recent decades, the health risks to children have increased. The family is the most important framework for children's development. The trend towards smaller families, the increasing numbers of single parents and high divorce rates have a decisive influence on the daily life of children. These factors have health consequences to the extent that the health-promoting and protective influence of stable parent-child and sibling relationships is disturbed. The need for external childcare has quadrupled in Switzerland since 1991. But there is still a lack of adequate facilities affordable to low-income parents. It has been shown that the early integration of children into extra-familial care facilities tailored to their needs promotes their social, intellectual, physical and creative development.

Family poverty leads to material, physical and mental impairments. In Switzerland, 31 per cent of all social assistance recipients are younger than 18. Moreover, children under six have, relative to all age groups, the greatest risk of becoming dependant on social assistance. Most children in this situation live in households with a single-parent mother; a fifth in large families with three or more children.

We are already in a position to respond to these challenges. The Swiss health system offers infants and children a well developed medical network, ranging from prenatal checkups, to screening tests for diseases among newborns, to effective immunisations. School medical services supplement health monitoring and early detection. In addition, a variety of programmes are brought to bear in children's daily life: the Federal Social Insurance Office (FSIO) coordinates and finances child protection projects, the Federal Office of Public Health (FOPH) has developed the national "Nutrition, Activity and Health" programme and several cantons and the Health Promotion Switzerland foundation have focused their efforts on a "Healthy Body Weight" programme aimed at children and young people.

Youth and Adolescence

The majority of young Swiss people of both sexes aged between 10 and 24 are healthy. But 10 to 30 per cent of them suffer from physical or mental impairments. In recent decades some alarming trends have been observed:

- The number of young people suffering from a chronic disease or disability is increasing. This is related, among other reasons, to the fact that children who would previously have died of cancer or degenerative diseases are surviving.
- As in neighbouring countries, an epidemic-like increase in overweight and obesity is being observed among young people in Switzerland. They eat too much fat and too few fruits and vegetables, and they walk and practise sport less and less.
- Over the past 20 to 30 years, the consumption of legal drugs like alcohol and illegal drugs like cannabis has been increasing steadily. In no other country is the consumption of cannabis by young people as widespread as in Switzerland.
- The suicide rate among young people is high compared to neighbouring countries. Among young men it is 20 per 100,000 inhabitants; in neighbouring France and Germany it is half that.
- Lastly, the number of victims of violence is also on the rise. In the 15–19 age group, two thirds of all deaths among teenage girls and three quarters of all deaths among teenage boys are the result of violence, which is equivalent to 26 in 100,000 young people.

Uneven distribution of opportunities

Young people are subject to many factors that either adversely influence their health or promote it, and they are not affected by them in equal measure. Thus, girls and young women suffer more frequently from mental problems and eating disorders. Uncertain future prospects mainly have a negative impact on young people who come from disadvantaged socioeconomic backgrounds or who have problems in school. Teenagers with an immigrant background, in particular, face a higher health risk in some areas.

The cantons, the Health Promotion Switzerland foundation and the Federal Office of Public Health support a variety of health prevention and promotion programmes for young people. Nevertheless, public health institutions ought to be more attuned to the special needs of young people. There is a lack of opportunities to take advantage of medical and therapeutic contact with young people to put education and preventative measures into practice.

Moreover, schools could also do more to establish concrete rules of behaviour aimed at improving the overall school climate. This would not only have a positive effect on pupils' school performance but also on their health. Because access to education and training has a decisive impact on health, special efforts must particularly be made for children who have difficulties in school.

Health of Single Parents

Single-parent families are the exception in Switzerland. Single-parent households account for 8.4 per cent of all family households and 5.1 per cent of total households. In nearly 90 per cent of single-parent families, the mother assumes sole responsibility for raising the children. The statements below apply primarily to mothers who are raising their children alone, because almost no information is available about single fathers with sole responsibility for raising their children.

Single parents shoulder a double burden. They are at least partially responsible for providing economically for the family and at the same time they have to bring up their children. Research to date has mainly focused on the difficult economic circumstances of single-parent families. Single-parent families have among the lowest household incomes: a third of the income of single-parent households comes from social security benefits, and approximately 10 per cent of parents in this situation are “working poor”, that is to say that they are barely able to make ends meet despite gainful employment. Too little research has been done on the health effects of single parenthood.

Low Mental Wellbeing

There is, however, considerable documented evidence that single mothers are in worse health than mothers in couples. Surveys show that the health of single mothers is worse than that of mothers who live in a partnership with the father of their children. This is particularly true for the mental wellbeing of the women concerned. They complain more often than married mothers in partnerships and than single women without children about their lack of mental equilibrium. Women in a relationship with a partner – with or without children – have a more positive attitude towards life.

Single-parent mothers are more likely to smoke and to exercise less than co-parenting mothers. Other than this, these women do not exhibit any other behaviour that would impair their health or that of their children. Single-parent women generally use the health care system less frequently than other women. But when they do see a doctor, the number of visits is higher.

Single mothers are often unemployed, which is associated with an increased risk of health problems and chronic complaints. There are two explanations for this: it is either a family phenomenon, where the health of single women is worse and their chances in the job market are diminished; or it is a class phenomenon, i.e. these women's state of health is a direct result of unemployment, which puts them under high psychosocial stress.

Initiatives specifically focused on promoting the health of single parents are few and far between. But various national and cantonal initiatives are underway to give single mothers better access to the job market and to combat poverty among single-parent families.

Migration and Health

Around a third of the Swiss population are people with an immigrant background. This means that they either immigrated to our country or were born here but have at least one parent who immigrated to Switzerland. Although a large proportion of immigrants are well integrated and their health is hardly any different from that of Swiss citizens, studies have shown that they are exposed to specific health risks.

For example, infants of African, Sri Lankan or Turkish nationality, as well as those from the former Yugoslavia, have higher mortality at birth than Swiss children. Mothers from Africa and Sri Lanka are the most likely to give birth to infants with low birth weights; the likelihood of a stillbirth is also particularly high among them. In surveys, people from Turkey assess their own state of health as bad or even as very bad. Consequently, they frequently see a doctor and take painkillers or tranquillisers.

Low Social Status as a Health Risk

Generally speaking, immigrant groups who have come to Switzerland in the past 20 years in search of work or asylum – people from Southeast Europe, Portugal, Africa, Asia and Latin America – are more likely to live in situations that adversely affect their health. They typically have a relatively low socioeconomic status and a lower level of education, and they work in sectors that follow economic cycles and pay the lowest wages.

The living conditions connected with the above-named factors are key determinants of their state of health. Immigration itself does not necessarily entail a health risk. But scientific studies in many immigration countries have demonstrated that if they are socioeconomically disadvantaged, immigrants are more likely to become ill or die earlier than the majority of the population.

The health disadvantages of the immigrant population are partly the result of language-related communication problems or discrimination by the indigenous population. In addition, they are sometimes subject to legal restrictions with respect to social assistance and employment due to their residence status. Access to health care and prevention services is often obstructed by language or cultural barriers or because immigrants are ashamed to use the relevant services.

The authorities have identified these problems. Accordingly, the “Migration and Health” project launched by the federal government in 2001 supports numerous health care and promotion initiatives, as well as education and research programmes focused on immigrants. Individual cantons have also taken the initiative. Geneva, for example, has taken the lead in health prevention work and research on health disparities. It also needs to be considered, however, that the number of well to highly educated foreigners is rising steadily. Little is known so far about immigrants’ psychological and social burdens and their health effects.

The Older Working Population

Baby boomers in Switzerland are growing old. As a result, the number of over 50-year-olds in the working population is rising steadily. Known in Switzerland as the “older employed”, their share rose from 25 to 28 per cent of the working population from 1996 to 2007. It is estimated that by the year 2020, one third of the working population will be aged 50 or older.

Consequently, older people are generating a growing share of Switzerland's gross domestic product (GDP). Because their health determines their ability to work, it is also becoming more significant for economic reasons. This trend is likely to pick up steam, particularly because a debate about an extension of the working life is currently underway in Switzerland. The challenge for the future is to strengthen the performance and work capacity of people in the labour force early on in their working life and to maintain it as long as possible.

When surveyed, a fifth of the older employed currently respond that their work is physically exhausting. Even more frequently, they report that their work drains them mentally. The first statement applies in particular to people who are poorly qualified professionally. People in managerial positions, on the other hand, are more likely to complain of high psychosocial strains such as stress, sleep disturbances or exhaustion. It is worth noting that the risk of health-related work absenteeism does not increase with age. But when older employees do become ill, they tend to miss work for longer periods.

High Psychosocial Demands

In tandem with the demographically driven ageing of society in recent decades, the economy has undergone a marked structural transformation towards the service and knowledge society. Although work has become physically less burdensome, the mental and psychosocial demands it places on people have increased. Modern workplaces typically force people to cope with frequent innovation, place high demands on their concentration and frequently require them to multitask. Work pressure is, by and large, very high in Switzerland.

By no means does it follow that the performance of older workers has to decline. It does not decline when individual workers' abilities are calibrated to the demands of their job. If people's capacity to work is to be maintained they as grow older, their health and professional skills must on the one hand be preserved or improved and, on the other, jobs must be adapted to their age. In this way it is even possible to maintain the working capacity of people with health-related restrictions.

In 2007, the Swiss Federal Council published its “Swiss Ageing Policy Strategy” aimed at maximising the potential of older employees. To achieve this, the working environment should be designed in such a way that men and women are able to optimally develop their professional potential over their entire lifespan. Numerous Swiss enterprises have recognised this challenge and are consequently implementing case management as well as comprehensive health management programmes. Through its “Workplace Health Promotion” programme, the Health Promotion Switzerland foundation advises and supports public and private institutions in promoting health and the quality of life in the workplace.

Healthy Ageing

People in Switzerland currently have one of the world's highest life expectancies at birth: on average, 79.1 years for men and 84 years for women. It is therefore not surprising that the number of elderly people, particularly those over 80, is rising markedly. According to estimates by the Federal Statistical Office, approximately 600,000 more people aged over 80 will be alive in 2050 than today.

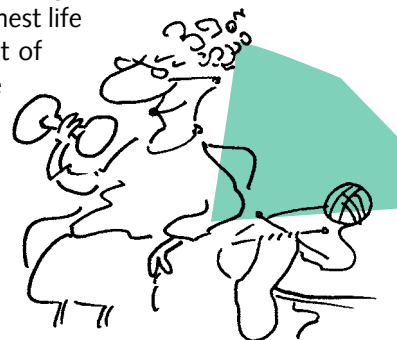
As the number of elderly and very elderly people increases, so does the incidence of chronic diseases. The likelihood of illnesses such as cardiovascular diseases, rheumatism, cancer, or a combination of these conditions, increases with age. Within an age group, however, individuals' state of health varies widely. Some people reach old age and only need care for a short period before they die; others need care in their early senior years and for many years thereafter.

In Switzerland, however, we still have too little data to reach clear conclusions about the care requirements of older people. The same applies to the future need for care services, particularly for people with dementia disorders. After age 65, the proportion of people with dementia doubles every five years. Among 65–69-year-olds, 1–2 per cent have cognitive impairments due to dementia; among over-90-year-olds, the figure rises to more than 30 per cent. According to calculations by the Swiss Health Observatory, long-term care costs could double by 2030 due to the rising number of people over 80.

Biography and Health

People are not just getting older. Their prospects for a long life in good health and free of disability has also grown. Today, "old" can no longer be equated with illness and the need for care. That is why in recent years, the image of old people has improved. Old age is increasingly perceived as an active stage of life that can be shaped by the individual. Accordingly, the social role of older people no longer depends exclusively on their chronological age, but much more on their individual abilities and possibilities. Active ageing means using good health as a life resource, preserving one's independence and participating in social life.

It is no coincidence that Switzerland, with its high standard of living and education and well developed medical care system, has one of the highest life expectancies in the world. Nevertheless, health in old age is the result of many positive and negative influencing factors. It is determined over the course of an entire lifetime, and older people's state of health differs from one individual to another as much as their biographies. That is why prevention and care must also be tailored to individuals. For example, the "Sanaprofil" process, which was first introduced in the canton of Solothurn, is designed to collect comprehensive health information from the social and living environment of elderly people and to establish individual prevention and care plans.



In order to improve the health of older people, it is imperative that we deepen our knowledge of the determinants of healthy ageing. In addition to the medical situation, psychological, cognitive, functional and social conditions also need to be considered and their influence during the ageing process monitored.

Part III: Impairments to Good Health

Cardiovascular Diseases – Coronary Heart Disease and Stroke

In Switzerland, approximately 30,000 people a year suffer an acute coronary event; approximately 12,500 suffer a stroke. Coronary heart disease is the most common cause of death in our country. It occurs when blood flow to the heart is reduced by a narrowing of the coronary blood vessels. Disruption of blood flow to the brain is referred to as a stroke. This can be caused by blockage of a blood vessel in the brain (cerebral infarct) or by bleeding from a ruptured blood vessel (cerebral haemorrhage). Stroke is the third most common cause of death.

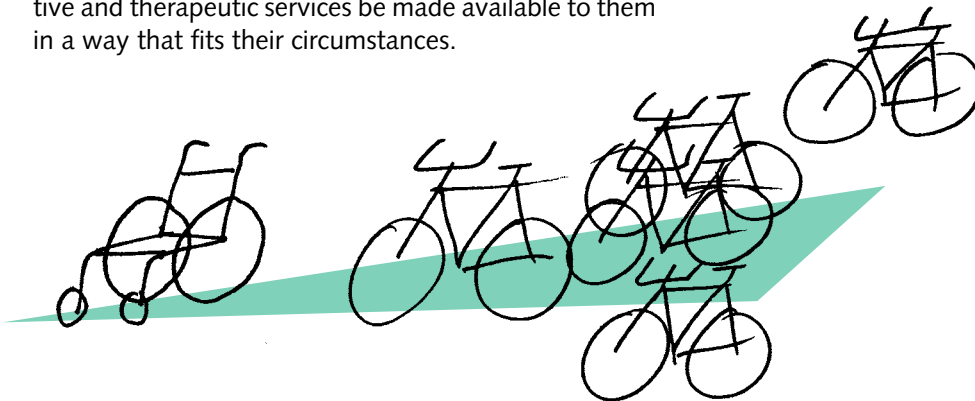
The mortality rates from both diseases are distinctly below the EU average among men and slightly below among women. Thus, the situation in Switzerland is relatively good, which is probably attributable to a high standard of living and good medical care. But due to demographic ageing, an increase in coronary heart disease and stroke is to be expected in the future. It is noticeable that people from lower social strata die more frequently and at a younger age than those from higher strata.

The classic risk factors – overweight, high blood pressure and lack of physical activity – account for only a third of the difference in the case of coronary heart disease. Therefore, over and above these classic risk factors, there have to be psychosocial determinants and factors which on the one hand favour the development of cardiovascular diseases and, on the other, act as protective factors.

Education and Prosperity as Protective Factors

A high level of education is a protective factor against death from coronary heart disease. In Switzerland, 64-year-old women with the minimum compulsory education have an almost 80 per cent higher risk of dying from an acute heart attack than women who completed secondary level education. At the tertiary education level the differences are even greater. People with an educational level above compulsory education tend to have more social resources and possibilities at their disposal to do something about health problems. In the workplace, high work demands combined with limited authority to make decisions have also been shown to be a serious risk factor for heart attack. Income also plays a role: living on a low income is frequently associated with psychosocial stress, which has a negative effect on many body functions.

This diversity of risk factors shows that prevention of cardiovascular diseases must also be broadly based. It should first of all be focused on improving socioeconomic living conditions, the acquisition of more education and training and the promotion of social resources. The population's lack of awareness of the importance of recognising risk factors early on and modifying behaviour accordingly is a major shortcoming. It is particularly important that risk groups, for example people with hazardous occupations, be identified and that preventive and therapeutic services be made available to them in a way that fits their circumstances.



Cancers

In Switzerland one person in three will develop some sort of cancer during their life. From 2001 to 2004, an average of 34,000 new cancer cases were registered. During the same period, approximately 8,500 men and 6,500 women died annually from cancer. Around a quarter of all deaths are attributable to a cancerous disease.

Yet by international comparison Switzerland comes out well: for all types of cancer the five-year survival rate is 55 per cent for men and 61 per cent for women. These numbers also reflect the high quality of treatment for cancer patients. Specialists are well trained and new discoveries are quickly integrated into treatment.

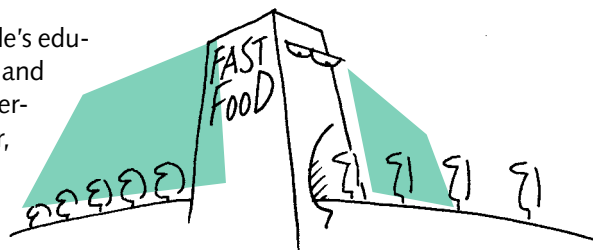
For many frequent forms of cancer, such as cancer of the colon or the prostate, old age is one of the most important risk factors. The demographic growth in the number of over-65-year-olds in Switzerland alone will result in an increase in the absolute number of cancer cases. This will even be the case if the age- and sex-specific cancer risk remains constant or decreases with the aid of preventive measures.

Smoking and Nutrition as Risk Factors

Cigarette smoking is one of the few cancer risk factors that can be directly and successfully reduced through behavioural modification. Therefore, reducing the proportion of smokers in Switzerland remains the most important line of action for the primary prevention of cancers. At least among men, in recent years it has been possible to achieve a reduction in lung cancer mortality. The introduction of smoke-free public places, particularly as a result of political measures, has proven to be a significant contribution in this area.

The overall negative effect of poor nutrition combined with a lack of exercise and excess body weight on the risk for various types of cancer has been scientifically proven. But given the rising trend in these risk factors, over the next 10 to 15 years positive effects resulting from primary prevention efforts are hardly to be expected.

In Switzerland, as in other European countries, people's education level is closely related to their life expectancy and overall mortality rate. The relationship between cancer-specific mortality and the level of education, however, is generally weak or non-existent. Lung cancer is an exception: in this case men and women from population groups with a lower educational level have a markedly higher mortality rate.



The early detection of cervical cancer by means of Pap smear tests over the past several decades has contributed to a reduction in the cervical cancer mortality rate. Of the other available early detection methods, only mammographic breast cancer screening and colon cancer screening by testing for unseen blood in stool samples have been scientifically proven to be effective. In Switzerland, as in other countries, technological advances in diagnostic methods have sparked a growing debate about which early cancer detection methods ought to be widely adopted and which ought to be abandoned by society.

A programme to combat cancer such as the one outlined in the National Cancer Programme developed by OncoSwiss on behalf of the Confederation and the cantons is based on all levels of intervention in the health sector: primary prevention, early diagnosis, treatment, maintaining quality of life, pain management and humane care for the dying (palliative medicine).

New Infectious Threats

In recent decades, the Swiss population has been repeatedly exposed to new or increasing numbers of pathogens that required an appropriate response. These include HIV-AIDS, the SARS virus, the BSE (mad cow disease) agent and Bird flu. The diversity of this challenge is a consequence of the multiple modes of transmission: infections can originate from infected persons, animals or foods. But infection sources are also concealed in the environment and health-care institutions such as hospitals.

Infections transmitted by ticks and mosquitoes are expected to increase in the future. In Switzerland, both types of insects spread seasonal infectious diseases caused by bacteria or viruses. Because global warming promotes the growth of ticks and mosquitoes, new infection foci could emerge. Behaviours such as risky sexual contact or the exchange of needles among drug addicts strongly favours the spread of hepatitis viruses and HIV.

Infections with resistant microorganisms, which occur in hospitals and homes for the aged, can become increasingly prevalent in the population. Random sampling of acute hospitals in Switzerland between 1989 and 2002 revealed that 8 to 10 per cent of hospitalised adults had at least one infection that they had contracted in hospital. In inpatient and outpatient medicine, bacteria such as MRSA are a significant problem because they are resistant to commonly used antibiotics.

Lastly, growing international travel and transportation of animals and foodstuffs increases the danger that resistant and exotic infectious agents will be imported. Cases in point are the Bird flu and the SARS virus, which in 2003 was carried very rapidly from Hong Kong to Europe and America.

Infection Surveillance and Prevention Programmes as Core Elements

The well coordinated monitoring of infections that is already in place in Switzerland as well as proactive prevention programmes can reduce these risks. Already planned measures include increased coordination among the relevant federal agencies, such as the Federal Office of Public Health, the Federal Veterinary Office (FVO) and cantonal agencies. Working groups operating across agencies already proved their value during the BSE crisis and the SARS outbreak.

In 2007, the Swiss Federal Council announced that it would create its own unit to monitor food safety and that it would aim for closer collaboration with the European Union in the control of infections. In addition, the Federal Office of Public Health is planning to open a reference centre for infections transmitted by ticks.

Despite all the political efforts that have been made, there is still a need for action in Switzerland. It should be determined whether monitoring ought to be extended to infections that have been spread by different disease carriers, domestic animals and health institutions. An annual report for the whole of Switzerland on the results from the infection control of drinking water, food, transplanted organs and tissues and imported goods, as well as from monitoring for antibiotic resistance and occupational exposure to infections, would also make good sense.

Mental Health Problems

Mental wellbeing and mental illness are not mutually exclusive; in fact, they can overlap to some degree. Being in good mental health means being capable of leading a meaningful life. Such a life also includes conflict, suffering and crises. Crucial for good mental health is a person's ability to overcome such adverse circumstances.

Mental illnesses are very frequent. About half of the population of Switzerland suffer from some type of mental disorder at least once in their lifetime. Every year, 25 to 30 per cent of the population are newly affected. Depression, anxiety disorders and substance addiction are particularly frequent.

Because mental disorders often begin early in life and tend to last a long time, their personal, social and economic consequences are significant. This is reflected in the demand for psychiatric services and the sharp rise in disability payments for mental disorders. Between 1986 and 2006, disability payments for mental health problems increased fivefold. Today they account for approximately half of illness-related disability payments.

Between increasing exclusion and increasing well being

That said, when surveyed, nowadays a distinctly increased number of Swiss people state that their mental health is good. A polarisation appears to be taking place between the growing social marginalisation of people suffering from a mental illness and the growing mental wellbeing of the majority of the population. The widespread and deep-rooted stigmatisation of mental illness remains a particularly intractable problem for the social integration of people grappling with mental health problems. Although the asylums of previous generations have disappeared and been replaced by supportive care services that are integrated in facilities such as day centres and community homes, social prejudice and marginalisation of the mentally ill have not declined nearly enough.

Socioeconomic conditions such as employment status, education, income as well as the family and social environment are key social factors of health. People without a partner and without work, with a low level of education, low income and without a social support network are vulnerable and at greater risk for illness. When several risk factors are present – e.g. a single parent on a low income – the risk increases disproportionately.

A variety of important single activities have been initiated in the fields of psychiatric care, disability prevention and health policy. For example, the Confederation and the cantons have elaborated a mental health strategy. The fifth revision of the Invalidity Law also includes new measures to facilitate early intervention in the workplace and social rehabilitation for employment. Thus, mental health has become one of the central themes of health promotion and prevention.



Yet in Switzerland there is still a need for effective action to create awareness about the central importance of mental health. People are mentally stable and healthy when they know their own shortcomings. The integration of the mentally ill in society will only be possible when there is a general awareness of mental health in which highs and lows can coexist.

Accidents and their Social Consequences

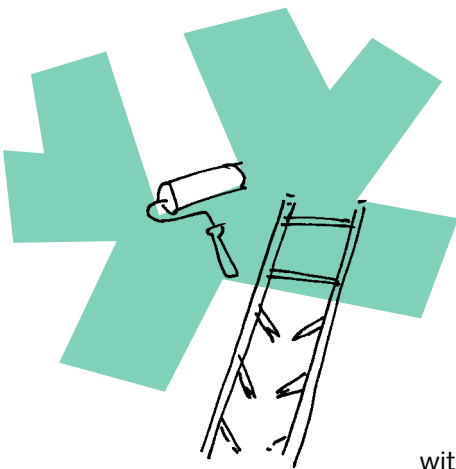
Most of the population is involved in accidents. Each year, one Swiss resident in six receives medical treatment for an accidental injury; approximately 2,100 people suffer a fatal accident. Accident events are not only influenced by demographic and economic developments but also by social trends.

Thanks to measures to improve workplace safety and as a consequence of structural changes in the economy, the number and severity of occupational accidents has been reduced. The number of traffic accident victims has fallen despite a marked increase in traffic volume: in 1996, 616 people died on Swiss roads; in 2006 only 370. But this positive trend is offset by a rising number of domestic, recreational and sport-related accidents. In 2004, for example, three times more people died in domestic and recreational accidents than in traffic accidents.

Many risk factors that can lead to accidents have long been known. Excessive alcohol consumption and speeding are the main risk factors on the road. But drivers' age and sex also play a role in accidents. Men have a distinctly higher risk than women. The risk of dying in an accident is twice as high among traffic participants aged 18–24 than among 50–54-year-olds. Moreover, people with a lower level of education also have a markedly higher risk of a fatal traffic accident.

Preventions Pays

Similar risk relationships apply to sporting, recreational and domestic accidents. Trendy new sports such as snowboarding are particularly hazardous. Among senior citizens, falls at home frequently result in dependency or even death. These examples make clear that it is important to focus accident prevention on specific target groups.



The annual losses sustained by the national economy due to accidents are considerable. In 2003, the financial costs of all accidents amounted to more than CHF 13 billion. If the subsequent costs to the national economy as a whole are included, the total cost is approximately CHF 54 billion. These figures are quite out of proportion to the amounts spent on the development of accident prevention in Switzerland.

Prevention pays. International comparisons have shown that when accident prevention is promoted by the authorities, nations invariably achieve a high level of road safety. Switzerland is on the right path in this respect. The federal "Via Sicura" programme includes a series of measures aimed at reducing the number of serious accidents on Swiss roads.

The milestone of fewer than 300 traffic deaths per year by 2010 is within reach.

Part IV: Fundamental Determinants of Health

Education as a Health Resource

An educational expansion has taken place in Switzerland over the past 20 years. As a result, the proportion of the population that has only completed a lower secondary level of education has dropped below 30 per cent. In contrast, the number of people who have completed a university or higher technical college education has nearly doubled and currently stands at approximately 20 per cent.

Despite this positive trend, education remains an unevenly distributed asset with a variety of consequences on health. Individuals' health literacy depends on their level of formal education: People with a high level of education generally exhibit behaviour that is conducive to good health, have a better subjective assessment of their own health and a higher life expectancy than educationally disadvantaged population groups. These differences are particularly significant between people who left the education system as soon as they completed compulsory schooling and those who completed an apprenticeship. In contrast, however, the difference between the group with a completed apprenticeship and university graduates turns out to be minimal.

In what concrete ways does education promote good health? Knowing the factors that influence our health is an important resource for a healthy life. Individuals who are aware of the dangers of smoking and the advantages of regular exercise can modify their behaviour to maintain or even improve their health. And should they ever fall ill, knowledge and education will also be beneficial. Education enables people to critically evaluate their doctor's diagnoses and treatment recommendations and to understand medicine package inserts. Thus, education improves our knowledge and ability to cope with health and illness.

Better Prospects Thanks to Education

Besides health knowledge and health literacy, education has other, less evident, effects on health. Education has an indirect effect through economic power: people with a high level of education have better career prospects. They are not forced to do physically strenuous or dangerous work and are better able to afford healthy food and a home in a quieter neighbourhood. People who are economically better situated are more able to adopt healthier behaviour and afford a higher quality and quantity of health care services.

The social value of education is undisputed in Switzerland. Sustained and rising public spending on education in spite of financial belt-tightening is a testament to this. Moreover, the relationship between education and health is well known to the general population and to political decision makers. This awareness has prompted numerous initiatives, mainly at the cantonal level, which take account of the positive effects of education on health.

But much remains to be done. In particular, measures that target education as a health resource should not limit their focus on opening up the education system to all social strata, on education curricula and on schools. People who have only completed compulsory schooling benefit relatively little from such interventions. Their needs must also be addressed through out-of-school continuing education and health promotion programmes.

Environment as a Resource for Health

An intact physical environment is an essential precondition for people to be and remain healthy. From a global perspective, a shortage of clean drinking water as well as the contamination of air and water with pollutants are responsible for countless deaths and illnesses. Four environmental factors are particularly relevant for the health of people in Switzerland: air pollution outside buildings, tobacco smoke inside buildings, climate change and radiation exposure.

The health effects of air polluted by contaminants includes both respiratory tract and cardiovascular diseases. According to studies, air pollution causes 3,700 deaths per year in Switzerland. The cost to the national economy amounts to approximately CHF 4 billion per year. Although by the year 2000, the air quality had partly improved as a result of clean air measures, since then the situation has stagnated or even worsened. The reason for this is the rising population and traffic density. In July 2007, the Federal Council decided to revise the Clean Air Act that sets limits on air pollutants in order to reduce harmful particular matter emissions.

According to estimates, several hundred people die every year in Switzerland from the consequences of passive smoking. In recent years, awareness of the health costs of passive smoking has risen, presumably, among other reasons, because there has been positive experience with smoking bans abroad. The Swiss parliament is currently deliberating a new law designed to protect people from passive smoke in public places. There is debate about whether exceptions should be made for restaurants and bars. Stronger smoking bans are already in place in several cantons.

Policy Responses



Climate change poses a risk for human health because heat waves may become more frequent in the future. The elderly, the ill and the very young suffer the most from heat waves. Ozone pollution and the risk of tropical diseases also increase as temperatures rise. Political measures such as the CO₂ law, combined with fossil fuel taxes, help reduce carbon-dioxide greenhouse emissions. But such measures cannot reduce the health burden sufficiently. That is why it is incumbent upon decision makers in a range of policy areas, including the environment, transportation, energy and agriculture, to tackle the causes of climate change forcefully and consistently.

Radiation exposure can be traced to different sources: UV radiation in sunlight, radon from the soil and electromagnetic radiation from electronic equipment and mobile communication devices. It is still unclear whether or in what ways electromagnetic fields near high voltage power lines and radio transmission towers affect people's health. Limits on radiation levels have been introduced as a precautionary measure to protect the population from exposure.

Part V: The Health Care System

Resources and Demand for Medical Services

All residents of Switzerland have access to the resources provided by the health care system. This is guaranteed by the Health Insurance Act. Nevertheless, some medical services are not equally available everywhere, because resources and demand for these resources are unevenly distributed from one canton and region to another. But existing regional differences are not reflected equally in all medical services. In Switzerland, the impact of regional differences is mainly seen on three levels: between urban and rural areas, between eastern and western Switzerland, and between border regions and non-border regions.

The difference between urban and rural areas makes itself felt first of all in outpatient care. In urban areas, medical services are markedly more comprehensive. These resources are also partly available to patients in non-urban areas, namely when they travel to cities for treatment. But people who live in cities still make use of inpatient services more frequently than people who live in other regions. This is particularly true in the case of psychiatric treatment.

Differences between east and west and town and country

Most outpatient medical services are provided by physicians. More than half of them are general practitioners or family doctors who are fairly evenly distributed throughout Switzerland. A different picture emerges in the case of specialists, including paediatricians, gynaecologists and psychiatrists, who tend to practise in urban areas. That is presumably why the range of services offered by individual doctors in rural areas is wider than that offered by doctors working in cities. Another indication of this is the fact that in rural areas, half of all psychiatric diagnoses are made by primary care providers.

Differences between eastern and western Switzerland primarily involve chronic diseases. This becomes more evident the older the patients. In eastern Switzerland people tend to use nursing home services more, while in western Switzerland Spitex services are increasingly popular. This is because fewer nursing home places are available in western cantons.

Lastly, there also appears to be a connection between an area's proximity to an international border and the number of available hospital beds. The highest bed densities are registered in Basel-City, Appenzell Ausser-rhoden, Ticino and Graubünden, the last three of which have a higher number of beds in private hospital wards. Basel-City and Ticino, on the other hand, have the highest hospitalisation rates in Switzerland.

All these inequalities involve both resources and the use of services covered by compulsory health insurance. In the case of medical services which are not covered or only partly covered by basic insurance there are also noticeable socioeconomic differences. People with a higher level of education are more likely to avail themselves of preventive services such as mammography, special medical treatments and dental care than less educated people with the same health needs.

Costs, Financing, Efficiency and Solidarity

In 2005, a total of CHF 53 billion, or approximately 11.4 per cent of GDP, was spent on health goods and services in the health care sector in Switzerland. This put Switzerland in second place in the world, behind the United States. Inpatient care accounted for 46 per cent of all health care spending and outpatient care for 54 per cent.

In 2005, private households paid 66 per cent of all health care expenditures. The Confederation, the cantons and the municipalities accounted for 27 per cent. A large proportion of these expenditures went to subsidise inpatient care facilities, particularly hospitals. In Switzerland, 7 per cent of financing requirements – a relatively small share of the total – are covered by private enterprise contributions to accident insurance, old-age and survivors' insurance (AHV) and invalidity (disability) insurance (IV).

The situation varies considerably across the country. There are marked differences from one canton to another, both with respect to the structure of health care provision and to costs. In some cantons almost three times as much is spent on health as in others. There has been considerable debate about the causes for these differences. At the forefront of the debate are divergences in the organisation, structure and availability of services – on top of which come sociodemographic and socioeconomic differences. A relatively centralised health care structure and a high proportion of medical specialists or specialist hospitals have variously been blamed for above-average costs in some cantons. It is worth noting that health factors play a less significant role.

Greater Efficiency is Possible

The big cost differences from one canton to another make themselves felt directly in correspondingly big differences in insurance premiums. But the insured are at least partly able to optimise their premiums – by changing their place of residence or health insurance provider, voluntarily restricting the services they receive from the health care system or assuming a higher share of health care costs by, for example, by paying a higher deductible.

Health care spending analyses indicate that the compulsory health insurance could function more efficiently than it does now. For example, the basic state parameters could be improved. If regulated competition is to play a genuine role as the basic idea behind compulsory health insurance, the contractual obligation between insurer and service provider and government subsidies to inpatient facilities will have to be adjusted. This ought to make it possible to achieve a health care system that is more cost-effective at a national economic level.

Solidarity among the insured is a key principle of compulsory health insurance. Uniform per capita premiums ensure that costs are balanced between the healthy and the sick, between the young and old, and between men and women. Tax-financed subsidies to inpatient facilities and state-financed insurance premium discounts balance the financial burden shouldered by population groups with different incomes. Too few studies have been done in Switzerland to quantify these redistributions. But they are likely to be significantly smaller than in comparable health care systems which are more dependent on income, such as Germany, or which are more heavily tax financed, such as the Netherlands.

The Principal Health Care Challenges

The Swiss health care system will face major challenges in the coming years. In all likelihood, the demand for medical services will continue to grow and consequently also the costs.

This trend has different causes. Demographic shifts probably play the most important role: as the number of older people is rising, so is the demand for medical and nursing services. Furthermore, it is to be expected that certain chronic diseases such as cardiovascular diseases will be more common in the future. General medico-technical progress is also likely to result in more extensive diagnostic and treatment capabilities. Lastly, it is well known that the more prosperous a society is, the more use it makes of medical services.

Against this background, calls for a more effective control of rising costs and premiums are growing ever louder in Switzerland. Moreover, health care services and health care professions themselves are also undergoing structural change. It is particularly noteworthy that a growing number of medical personnel are working part time and that the proportion of women and medical specialists is also growing. On the other hand, the number of medical school graduates is not keeping pace with demand. If these trends continue, a decline in the availability of medical services is to be expected.

Adjustments in the Health Care System

All this means that adjustments in the health care system must be made not only with respect to the volume of medical services but also to their structure. Efficient and cost-effective health promotion and prevention measures, in particular, are becoming increasingly important, because they not only have the potential to improve people's quality of life, but also to make a major contribution to reduce health service costs.

In recent years, a number of policy initiatives have been taken in Switzerland to meet some of these challenges. Efforts have been made to make costs and premiums more competitive, such as by introducing higher co-payments for brand name medications when generic equivalents are available, by making it easier to change insurance providers and by adjusting the risk balance among health insurance funds. Other measures, such as reducing laboratory fees, are specifically aimed at slowing down cost increases. More far-reaching interventions are currently being discussed but have not yet been implemented. One of them is the introduction of contractual freedom between insurers and service providers.

The balance sheet of these efforts has so far been rather sobering. The reasons for this is that two opposing and evenly matched political camps have not reached an agreement about where fundamental reform efforts ought to be headed. One camp wants to make compulsory health insurance more competitive; the other is betting on more government regulation. To complicate matters, lobbying efforts on behalf of trade associations that have a stake in maintaining the status quo have been particularly successful.



Part VI: Final Considerations

Towards a Multisectoral Health Policy

Switzerland has for many years been among the world's leading nations in terms of health and life expectancy. As the United Nations Human Development Report documents, this fact is the result of the happy convergence of three key factors: economic development, education and health. Thus, Switzerland has a good foundation with regard to the most important social determinants of health.

Need for Action in the Health Care System

In Switzerland, the inpatient and outpatient health care system is fundamentally well developed and of a high quality. Together with other health determinants, it has in all likelihood contributed to the positive trend registered in recent decades by key indicators such as life expectancy. But the high performance of the health care system comes at a price: after the United States, Switzerland has the second most expensive health care system in the world.

Over the next decade, the health care system will face major challenges in different areas which will require appropriate political response. While this challenge can be anticipated with calm, the problems represented by rising costs and structural changes in the health care system do need to be tackled early.

Switzerland faces the same health challenges as other highly developed nations. These include the demographic transformation into an ageing society; the shift in the disease spectrum towards chronic physical and mental diseases, which are in many cases preventable; the individualisation of health needs; growing inequalities in prevention and health care; new threats from global diseases and epidemics; and the effects of climate change on health.

Using Health Determinants as Signposts

As a result of these trends, the most important widespread diseases, including cardiovascular diseases and mental health problems, are already on the rise. Moreover, they are unevenly distributed in the population: socially disadvantaged strata are generally more affected by them. Many of these chronic diseases could be prevented or at least reduced through preventive programmes. But prevention that attempts to steer individual behaviour towards healthier living runs into limits, because it has been shown that individual health behaviour is heavily influenced by the level of education, environmental factors and social and cultural norms and expectations.

In other words, the social determinants of health are at least as important as individual behaviour. To design a successful health policy and promote health awareness in the population, preventive efforts ought to shift their balance of focus between risk relationships and behaviour more heavily towards the former than is the case today.

Research as well as health policy in a number of countries is targeting the following health determinants: income and social status; social support and social networks; education and training; participation in the labour market; employment and working conditions; social and physical living environment; individual health behaviour, health literacy and coping strategies; healthy early childhood development; gender and cultural environment. Research into these social determinants of health is the foundation for new health promotion and prevention approaches. It is a signpost to improve the health of the population.

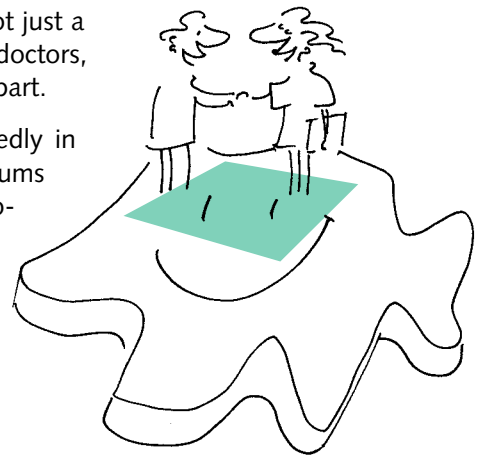
Health Policy: a Multisectoral Task

Meeting these challenges to the full will also require concerted health policy action, because the relationships between social determinants and health make it clear that tackling health problems is, rather, a multisectoral task involving many policy areas. This means that many health problems cannot be solved exclusively by means of health policy in the narrow sense of the term. Achieving the goal of healthy communities is a multisectoral task that has to involve social decision makers in many different fields.

There is need for action in consumer protection, the workplace, education policy and social policy, to name only a few areas. One of the aims, for example, is to optimise early childhood education and making workplaces more ergonomic. Citizens' health literacy needs to be improved and the health care system needs to be better tailored to the needs of patients.

Preserving health and providing optimal care for the ill is not just a task for the state. Employers, sports clubs, old people's homes, doctors, insurance companies and food producers also need to do their part.

Public interest in health and prevention has grown markedly in Switzerland in recent years. The results of tobacco ban referendums and political efforts to pass a new prevention and health promotion law are testament to this. But at federal level, there is still no coherent national health policy that firmly embeds health in all policy areas and thereby makes it possible to set priorities for action and to take more systematic account of health determinants than has hitherto been the case.





GDK Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren
CDS Conférence suisse des directrices et directeurs cantonaux de la santé
CDS Conferenza svizzera delle direttrici e dei direttori cantonali della sanità



Schweizerische Eidgenossenschaft
Confédération suisse
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Bundesamt für Statistik BFS
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