# SDectra

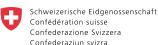


# Combating antibiotic resistance

The effectiveness of antibiotics is under threat. The fight against antibiotic resistance can only be won if it is fought on a transdisciplinary basis. This is why Switzerland's nationwide Strategy on Antibiotic Resistance (StAR) focuses in equal measure on human medicine, veterinary medicine, agriculture and the environment.

# 4 Switzerland could do even better

Although Switzerland is world class in terms of its healthcare policy, it is not world beating. In our interview, Ilona Kickbusch, one of the world's leading experts in this area, explains what our country could be doing even better and where the Health in All Policies approach falls down in daily practice.



# Developing a shared understanding of health

It takes more than just health policy to improve the health of the population. This is because many of the factors that influence health lie outside the healthcare system. A comprehensive approach driven by partnership between the FOPH and other federal offices and agencies is essential. Most importantly, all stakeholders need to develop a shared understanding of what health means.

The primary source of health is our everyday environment - in other words the places where we live, learn, eat, play, ride bikes, work and love. People's health is influenced by a large number of different factors known as determinants of health (see illustration). The first of these are personal determinants, such as inherited dispositions, social environment and individual health-related behaviours. However, social, economic and environmental conditions also have a direct or indirect influence on health. Specifically, we are talking here about determinants such as income, education or air pollution.

- People on a low income are almost twice as likely to have diabetes as people who enjoy a high income
- Well-educated people are generally healthier than those who left school after completing their compulsory education.
- Around 3,000 people die prematurely in Switzerland each year because of air pollution.

Road noise, heat and access to guns can also have an impact on health. The examples show firstly that there is an uneven distribution of health in Switzerland - in other words that not everyone who lives here has the same opportunity to enjoy a long and healthy life. They also show that health is a subject that impacts many policy areas, not just health policy. Determinants such as income, education and air quality are largely shaped by policies outside the realm of health policy itself - in other words, in areas on which the FOPH has relatively little influence.

According to the "Health2020" report, which sets out the Federal Council's health policy priorities, "the state of people's health in Switzerland is determined up to 60 per cent by factors not related to health policy." Health policy measures in the strict sense therefore often do not go far enough or are subsidiary to political measures and trends in other policy areas. Consequently, health policy cannot



The healthcare system is only one of many determinants of health. Much of what constitutes health is determined by factors outside the healthcare system. The three levels "Biological factors", "Personal environment and behaviour" and "Social, economic, environmental and cultural framework conditions" are in a constant interactive relationship. Individuals can only shape their environment to a limited extent, and there are certain factors that impact their health on which they have very little or even no influence.



An intact environment is conducive to good health. Conversely, the environment can also be detrimental to health. Noise and air pollution are examples of this – as are heatwaves, which can have severe consequences for the elderly in particular.

by itself alleviate the problem of a lack of health equity. Resolving the issue requires a broader focus that extends beyond health policy plus measures that are implemented outside as well as inside the healthcare sector.

Effective health policy must act at a broad political level and transcend all federal offices and agencies by aiming to ensure that important decisions such as revisions of acts and ordinances take account of health-related considerations. This is the aim of Health in All Policies (HiAP), of which the "Health2020" report says: "These social and environmental determinants need to be improved specifically at the federal level by intensive collaboration between the departments involved."

It should be noted here that there are determinants that individuals can influence, such as diet and exercise, and others that they have limited influence over, such as work and income. And there are even certain determinants that individuals are more or less powerless to change, such as the global economic situation or whether they live in a state of war or peace. Responsibility for health does not therefore lie solely with individuals, but also with various policy sectors, businesses and society itself.

# Focus on six subject areas

The FOPH's efforts to implement Health in All Policies are focusing on six subject areas that have been defined jointly with the Department of Home Affairs. The aim is to intensify and adopt a more systematic approach to collaboration between other federal agencies in these six areas, which are described briefly below.

# 1. Environment and energy

Ensuring the environment (soil, air, water, recreational space) stays as intact as possible is a good way to

promote health. Conversely, the environment can also be detrimental to health. Noise and air pollution are examples of this, as are heatwaves, which can have severe consequences for the elderly. Residues from medicines (hormonally active agents) and antibiotic-resistant bacteria are a further problem, as are elevated concentrations of radon inside buildings, to name a few examples.

# 2. The economy

The economy and health are closely connected. For example, economic crises and the associated redundancies can have a major impact on the health of affected workers and their families. Stress and back problems are an illustration of how work can make people sick. On the other hand, good working conditions and a healthy workplace improve people's health and give them self-confidence and strength. Work can also play an important role in bolstering mental health.

# 3. Diet and food production

Diet is closely linked to health. Non-communicable diseases (NCDs) are becoming increasingly common in Switzerland. Three of the main factors that play a causal role in NCDs – high blood pressure, excessive cholesterol and obesity – are diet related. Infected food can also help to spread dangerous germs such as gastroenteritides and listeria.

# 4. Education

The way babies, children and young people are raised and schooled has a major influence on their lifestyle and health in adulthood. This is firstly because children acquire health skills at school, and secondly their success at school and the level of education they achieve influence their choice of career, income and the place where they live. This in turn has a positive or negative effect on their health.

# 5. Exercise, mobility and natural

Exercise plays a key role in the prevention and treatment of non-communicable diseases (i.e. diabetes, cancer and respiratory, cardiovascular and musculoskeletal diseases). Exercise also helps to overcome mental problems such as stress, anxiety and depression, as well as contributing to physical and mental autonomy at all stages of life.

# 6. Social policy and integration

Social security and integration are key determinants of health. Social groups in Switzerland differ significantly as regards their state of health and health-related behaviours. Poverty, discrimination and social exclusion are directly detrimental to health. Socially disadvantaged groups are more likely to be exposed to living, working and environmental conditions that are damaging to their health. Problematic substance abuse - particularly alcohol addiction - can lead to social isolation, unemployment and poverty.

# Improving general conditions

In all these subject areas, the FOPH is endeavouring to partner with other federal offices to improve general conditions so that they are conducive to the best possible level of public health. In so doing, it is not setting out to take the lead in as many of these policy areas as possible. Instead it hopes above all to raise issues and concerns at the right time and in the right place,

and assist other federal agencies in implementing solutions that have a positive effect on the health of the population. Specifically, this will take the form of official consultations, for example, or by joining working or project groups set up by other federal agencies. Last but not least, the aim is to ensure that all stakeholders develop a shared understanding of what health means.

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# **Combating antibiotic resistance**

There is a real risk of antibiotics losing their effectiveness. Unless an interdisciplinary approach is adopted, it will be impossible to combat one of the most pressing problems currently facing medicine – antibiotic resistance. This is why Switzerland's nationwide Strategy on Antibiotic Resistance (StAR) covers human medicine, veterinary medicine, agriculture and the environment. StAR is a good example of the Health in All Policies approach.

Antibiotics are indispensable in human and veterinary medicine as a treatment for bacterial diseases. However, excessive and inappropriate use of antibiotics in both fields, as well as in agriculture, is constantly driving up the number of bacteria that are developing antibiotic resistance. This means that bacteria are adapting to the effects of antibiotics and becoming immune to them.

Resistant bacteria can spread in a number of ways. Person-to-person transmission generally results from contact. Moreover, resistant germs can be transferred from animals to humans and vice versa. In the natural environment, contaminated water can transfer resistant bacteria to food such as fruit and vegetables, and transmission through wastewater is also possible. It is clear from this that the problem affects humans, animals, agriculture and the environment. Furthermore, antibiotic resistance does not stop at national borders and can spread anywhere in the world. Accordingly, an integrated approach to the problem – the One Health approach - is essential.

# One strategy, eight fields of activity

In 2015, the Federal Council adopted the Strategy on Antibiotic Resistance (StAR). Subsequently, the Federal Office of Public Health (FOPH), Federal Food Safety and Veterinary Office (FSVO), Federal Office for Agriculture (FOAG) and Federal Office for the Environment (FOEN) were mandated to work together to implement the strategy. The FOPH is the lead agency, and implementation is taking place in conjunction with the Cantons and other stakeholders.

The strategy aims to ensure that antibiotics do not lose their efficacy in the long term. Implementation includes a raft of measures that have been divided into eight fields of activity. For example, iden $tifying\ emerging\ resistance,\ taking$ and adapting immediate action and, indirectly, measuring the long-term effects of the measures that have been implemented requires a comprehensive data survey (the "Monitoring" field of activity). But the public also needs to be more aware of how to use antibiotics correctly ("Information and education" field of activity).

# Working together to combat

Taking a systematic approach to combating antibiotic resistance puts all major stakeholders under an obligation. Specialists in healthcare, science and the economy face the challenge of monitoring antibiotic consumption and emerging

resistance in human and veterinary medicine, and reducing use to a necessary minimum. The key to overcoming the challenge is to ensure that patients, doctors, vets, etc. share a basic understanding of how to use antibiotics correctly.

This will require information and training on selecting and dosing antibiotics correctly, clear guidelines on when antibiotics can be administered, and low-cost tests that can quickly identify whether viral or bacterial infection has occurred. Hospital hygiene and measures to prevent infection will remain key. It should thus also be possible to reduce antibiotic consumption by taking preventive action, as is illustrated by successful efforts to improve animal hygiene and the conditions under which livestock is kept, or, in human medicine, efforts to improve hygiene in hospitals

Finally, research efforts need to be ramped up. With this in mind, National Research Programme 72 funded by the Swiss National Science Foundation (SNSF) aims to deliver fresh knowledge about how resistance develops and spreads or to develop new antimicrobials or faster diagnostic tests. Although NRP 72 is not a StAR measure per se, it will play a key role in the success of the One Health approach.

More information on the nationwide Strategy on Antibiotic Resistance can be found at www. star.admin.ch

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# At first hand



Pascal Strupler Director Federal Office of Public Health

# Health starts in people's everyday lives

The figures for life expectancy in Swiss towns and villages paint a clear picture. Residents of prosperous, primarily urban areas and conglomerations such as Zurich, Bern, Basel and Geneva, and along the country's lakes, have a good chance of living a long life. In the communities where people are living longest, life expectancy is nearly 83. By contrast, the inhabitants of poorer, generally more rural communities and mountain villages can only expect to reach 78. As these figures show, not everyone in Switzerland has the same chance of living a life that is as long and healthy as possible.

However, the reasons for this disparity are less apparent. It is clear that the main cause is not hospital quality or access to healthcare professionals, but other factors such as education, income or marital status. Socially disadvantaged people are more likely to experience mental illnesses, including addiction disorders. Very often these people live in areas with higher noise and air pollution levels and fewer green spaces. People with a low income are also more likely to use tobacco. Not only do the poor and unemployed tend to have poorer health and a lower life expectancy, they are at much greater risk of developing a serious disease.

Health equity is one of our key priorities, and the FOPH partners with other federal offices to promote it. We do so because health does not just start with the healthcare sector, but with other policy areas too. The aim is to enable everyone who lives in our country to live their daily lives as healthily as possible, whether they are at home with their family, in school, at work or enjoying their leisure time. Looked at from this perspective, health is a responsibility shared by virtually all federal agencies. The FOPH is willing to help fellow agencies to devise solutions that have a positive impact on health and to expand existing partnerships.

Our shared goal is to improve the health of the Swiss population and health equity by working with all stakeholders capable of influencing them.

# "We are already holding the instrument in our hands"

In an age when healthcare costs are rising and the number of people with chronic diseases is growing, Switzerland is trying to reverse the trend by adopting a Health in All Policies (HiAP) approach. Ilona Kickbusch is one of the world's foremost experts in the field. As part of this interview, she tells us what Switzerland could do better.

# Could you start by telling us what the term Health in All Policies means to you?

Health in All Policies isn't always about the big political strategies. The Ottawa Charter for Health Promotion says that health starts in people's everyday lives. It's not just the big things that are important, but also the small improvements we can make to everyday life - say banning sales of cola in schools or introducing an extra PE lesson each week. If everyone in Switzerland were to take half an hour's walk every day, the overall effect would be colossal. In other words, we're talking about a small change in a large population.

### And what would the result be at national level?

HiAP is primarily people-driven because we all have a right to health. Money plays a secondary role. HiAP not only saves money, it also does society as a whole a favour because one of the consequences of effective HiAP is reduced social assistance costs. Ultimately, a healthy population saves the state - and by extension all of us - a lot of expense.

# How healthy is Switzerland?

The country has one of the healthiest populations in the world. Nevertheless, the costs caused by chronic diseases are constantly rising. This is obviously linked to demographics too, because Switzerland has one of the highest life expectancies in the world. Nowadays most people are staying healthy for longer, and they simply start to develop chronic diseases later. We cannot assume that everyone will have no need of healthcare services until they get very old. I've been fortunate so far, but no one knows what the future will bring.

# What happens when people do need healthcare services?

We need to rethink our approach to elderly people. There is a lot of talk about integrating migrants, yet while that's going on we are building a parallel society of the elderly. There are old people's homes, senior citizens' meetings, pensioners' dances and lots more. My mother always used to say, "I'm not going, it's all old people there", even though she was elderly herself, and that statement sums up the situation perfectly. We need to organise our society in such a way that the growing number of senior citizens can take an active part in life. That also means new forms of accommodation for the elderly. The more old people are embedded in society, the less they will spend their time sitting in doctors' waiting rooms.

### What is the situation as regards HiAP in Switzerland?

There's a lot of discussion about it, but as yet no political impetus for it at national level. Multisectoral health policy therefore has an extremely important role to play at regional and local level. In my view, investigating exactly what impact HiAP is having at cantonal level would be a worthwhile research activity. The people in charge do not always realise that they are also helping to improve people's health when they build a bypass, for example. This is in contrast to the local residents, who generally become aware of the fact very quickly because they benefit almost immediately. Let's take another example. Climate goals are environmental goals and therefore relevant to health.

# In what areas has HiAP been most successful so far?

Excellent cooperation has evolved in certain areas. One good example is the nationwide Strategy on Antibiotic Resistance, where experts in human and veterinary medicine are working with environmental and agricultural specialists. The same goes for Switzerland's health-related foreign policy. Switzerland was the first country to come up with this type of policy.

# Where is there still a particularly large amount to do?

We are only slowly beginning to get a better understanding of mental illness and its consequences for the people affected, their environment and society. For example, how people organise their work when they also have family commitments, what the effects of always being available are and the general pressure to achieve that is part of

our fast-moving society. WHO Director-General Tedros Adhanom Ghebreyesus and pop star Lady Gaga, who suffers from depression herself, recently published a joint statement urging people to help break down the stigma that goes with such conditions. This kind of thing is obviously great because the stigmatisation of certain diseases is a major problem. I can still remember the days when even cancer was stigmatised and a taboo subject.

### What other problems are there?

Work pressure is a major issue. The question here is how to organise the way people work so that fewer of them experience depression or burnout, or have a heart attack. We need to think about how we can structure society so that the pressure is spread more evenly throughout people's lives, something that should make it more bearable. But pressure is not just something we are exposed to at work or school. It happens on social media too and affects children and young people in particular. Obviously, there was bullying when I was young, but it tended to stay in the school playground. Nowadays, with social media, it can assume completely different dimensions. We are seeing a shift in the policy fields addressed by HiAP. Where we once used to focus primarily on work, income or living space, we now have to think about how we can monitor the Internet more effectively, for example, because online harassment, intimidation or extortion are major problems that can cause depression and anxiety in victims.

# So, from what you say, the Internet and social media are also an area for HiAP?

Definitely. That being said, there are obviously many beneficial sides to modern technology. For example, my son lives in Berlin, while I live in Bern and travel a lot. There's nothing nicer than sending each other photos by WhatsApp so that we can share a bit of our lives with someone else.

### How firmly established is HiAP at international level?

There's a very strong international awareness of the need for multisectoral working. In fact, no country can afford not to adopt HiAP. The poorer a country is, the more indispensable HiAP becomes. In poorer countries, efforts focus on providing good schools and basic healthcare. After that, economic growth is important to create jobs. The state should therefore view

# Our interviewee:

Prof. Ilona Kickbusch is a political scientist who grew up in Munich and Chennai. India, where her father worked as a diplomat. From 1981 to 1988 she worked for the World Health Organization (WHO).



where she was responsible, among other things for the Ottawa Charter for Health Promotion. From 1998 to 2004 she was a professor at Yale University. That same year she set up her own consulting practice, since when she has acted as an independent consultant to organisations, governments and the WHO. She has been a visiting professor at the Universities of Tokyo, St. Gallen and Vienna, is a member of several scientific advisory boards and has been director of the Global Health Centre at the Graduate Institute of International and Development Studies in Geneva since 2008.

healthcare systems as an employer in their own right. Above all, healthcare systems need nursing staff - who are mainly women. We know that these women generally spend the money they earn more responsibly than men. Women tend to buy food, clothing and medicines, or pay their children's  $school\ fees\ -\ all\ things\ that\ are$ beneficial to family health.

# How important is international collaboration?

Very important. It's impossible to view HiAP in isolation. We can learn from each other, and that's a huge opportunity. We need joinedup thinking because it's a globalised world. Switzerland has a major responsibility here by virtue of its highly international nature.

# Where does HiAP fall down at a day-to-day level?

When people start going it alone. It's difficult to get people to work together.

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