CHILD HEALTH STRATEGY

FEDERAL MINISTRY OF HEALTH
Publication details

**Owner, editor and publisher:**
Federal Ministry of Health (BMG)
Radetzkystrasse 2, 1030 Vienna

**Responsible for contents:**
Dr Veronika Wolschlager MPH (BMG, project management)
Dr Birgit Angel MPH (BMG, minister’s office)

**Printed by:**
BMG printing house, 1030 Vienna

All rights reserved; no part of this publication may be used without written permission from the owner. No responsibility can be accepted for printing and typesetting errors or for any other errors.

Vienna, September 2011
Foreword

Dear readers,

Health is not a fixed and unchanging state that each individual simply possesses. Health is partly learned and can be improved or worsened over the course of a lifetime. This is why the health of children and young people is particularly important for our society. It is easiest for individuals to learn healthy behaviour as children, and children benefit the longest from this behaviour. They learn how to treat themselves from the way in which we treat them. And if we make a commitment to improve their health, the result will be a healthier society.

Health is influenced not just in my ministry; rather, it is the result of a raft of individual decisions made in all policy areas. A fundamental rethink is therefore required. Awareness needs to be raised that we are all involved in our health, each person individually and each policy area in a large number of its decisions.

This rethink forms the basis of the present strategy and is reflected by this strategy. Experts from a variety of areas in the practical field, science and administration have contributed their knowledge, experience and time to bring this strategy to life. I would like to take this opportunity to express my gratitude to them once again. Together they have succeeded in depicting the complex issue of child and adolescent health and in identifying possible solutions wherever there is room for improvement.

Nevertheless, this strategy can only be a start. In a number of areas, knowledge bases need to be created before further decisions can be made on the specific approach to be taken. In other areas, awareness raising and the persistent pursuit of distant goals are what is needed.

Let us take action and work together towards creating a more child- and youth-friendly society.

Alois Stöger
Federal Minister of Health
Content

Preliminary remarks .................................................................................................................. 5
Background ................................................................................................................................ 6
Approach .................................................................................................................................... 7
Overall aims of the strategy ........................................................................................................ 8

Topic area 1: Social framework ................................................................................................ 8
Goal 1: Raise awareness of the special needs of children and adolescents ................................ 9
Goal 2: Raise awareness of the shared responsibility for health across policy sectors (Health in All Policies) ........................................................................................................... 9

Topic area 2: A healthy start to life ............................................................................................ 10
Goal 3: Lay the basis for a good start during pregnancy and birth ............................................ 11
Goal 4: Lay the foundations for long-term health in early childhood ......................................... 12

Topic area 3: Healthy development .......................................................................................... 13
Goal 5: Enhance the life skills of children and adolescents ....................................................... 13
Goal 6: Use education positively as a key factor influencing health ......................................... 14
Goal 7: Enable and encourage children and adolescents to physical exercise ............................ 15
Goal 8: Encourage healthy eating in children and adolescents ................................................. 17

Topic area 4: Health equity ..................................................................................................... 17
Goal 9: Promote health equity for socially disadvantaged groups ........................................... 18
Goal 10: Promote equal opportunities for children and adolescents with health problems ... 19
Goal 11: Improve early detection and targeted support for children and adolescents .............. 20

Topic area 5: Care of sick children and adolescents in specific areas ..................................... 20
Goal 12: Optimise outpatient primary care and improve same in the early morning and late evening and at weekends ................................................................. 21
Goal 13: Strengthen paediatric expertise in emergency care ..................................................... 22
Goal 14: Improve the child-friendliness of care in hospitals ..................................................... 23
Goal 15: Improve care in selected areas (child and adolescent psychiatry, psychosomatics, neuropaediatrics, sociopaediatrics) ......................................................... 24
Goal 16: Improve integrated care of “modern morbidity” ......................................................... 25
Goal 17: Align neonatal care to the changed demographic circumstances ............................... 26
Goal 18: Improve the rehabilitation provision for children & adolescents ................................ 27
Goal 19: Assure paediatric nursing and expand the children’s hospice provision and palliative care .................................................................................................................. 27
Goal 20: Improve the availability of child-appropriate drugs ..................................................... 28

Implementation/accompanying measures ................................................................................ 29
Coordination unit with specialist expertise ............................................................................... 29
Concrete responsibilities include: ............................................................................................ 29
Intersectoral Advisory Board ................................................................................................. 30
Provision of data for regular appraisals .................................................................................... 30

Literature ..................................................................................................................................... 31
Preliminary remarks

Children and adolescents are the healthiest sector of the population in Austria. Foundations relating to circumstances and behaviour in later life are laid in childhood and have an important influence on lifelong health; formative habits are acquired. Promoting good health is therefore particularly effective in children and not doing so has a significant impact, especially if children and young people are already exposed to health risks. These risks may not develop into illness until children become adults, but we have the opportunity to protect lifelong health before illness sets in. If illnesses do occur, the care of children and adolescents is generally good, but there is scope for improvement in certain areas of health care.

We therefore need to maintain and protect the health of children and adolescents and to reduce health inequalities. Federal Minister Stöger therefore initiated the Child Health Dialogue in spring 2010.

It was clear that the health and well-being of children and adolescents should be improved and that they should be the centre of our attention as vulnerable members of society. The focus on health equity was particularly important. Since child health is very often influenced in policy areas other than the Ministry of Health ("Health in All Policies"), an invitation to participate in the dialogue was issued that was characterised by esteem and goodwill.

Preventing health risk factors and promoting the development of protective factors is often the most sustainable and efficient way of achieving better health. Structural recommendations needed to be developed with respect to prevention and health promotion. With regard to the health care system, problem analyses and proposed solutions were to be developed and reminders given about optimisation agreements that have already been concluded.

Today, more than one productive year later, we can say that solutions have been proposed in many areas. Moreover, the Child Health Dialogue process has already had a positive impact in the form of an increased focus on children and young people in many areas. This increasing focus on a child-friendly society needs to continue, however.

As described in greater detail below, some 180 experts from a variety of fields and professions responded to Federal Minister Stöger’s invitation and participated in the process at a total of 39 meetings. Their analyses and proposals for action form the basis of this paper.

Some key findings from the process

1) Health promotion and prevention need to be expanded and must start as early as possible with parents-to-be and very young children.

2) Cooperation with other policy areas and sectors should be strengthened and expanded with the aim of improving the living conditions of children and young people and thus laying the foundations for a healthy society.

3) Many of the activities currently being implemented are not generally known and for this reason alone they should be brought together and documented in the present paper. On a number of issues models of best practice can be recommended for more widespread implementation. This list is provided only as an example, however, and is not exhaustive (only available in the German version of the document).

4) Treating ourselves, each other and our children and young people responsibly and with respect could prevent a number of problems. It would therefore seem appropriate to recommend that a number of topics, including the special needs of children, child protection, health promotion, etc. and also the complex area of self-reflection and the development of values, are included in the training curricula of relevant professions.
Background

Around 1.75 million children and adolescents (under 20 years old) live in Austria, which equates to roughly a fifth of the total population. The proportion of children and adolescents in Austria is currently slightly below the European average. The birth rate (live births per 1,000 inhabitants per year) was in significant decline until the turn of the millennium and has since been in only slight decline, having halved since the mid-1960s from 18.8 to 9.3 in 2008. Around a fifth of all Austrian children and young people live in single-parent households and some ten per cent in patchwork families. Approximately 15 per cent of all children living in Austria have a dual migrant background (both parents have citizenship other than Austrian citizenship).

The link between socioeconomic status (education, income, etc.) and (child) health has been extensively proven. Virtually all health indicators and behaviours are less favourable in people with a low socioeconomic status than in those with a high socioeconomic status. The level of education has risen significantly in recent decades. Nevertheless, in 2008 a quarter of children and adolescents in Austria lived in a household in which the woman had completed no more than compulsory schooling. More children than adults are at risk of poverty. The proportion of people at risk of poverty is 15 per cent among 0 to 19 year olds compared with 12.4 per cent of the total population (EU-SILC 2008). In relation to other European countries, the risk of poverty is very low in Austria. Those at particular risk of poverty are children in single-parent households and in households with three or more children and also children with a migrant background.

In recent decades children’s illnesses have moved away from acute to chronic diseases. In developed countries an increase can be observed in lifestyle-related diseases, particularly related to eating and exercise habits, which result in overweight and obese children on the one hand and in significantly underweight children on the other. The increasing relevance of modern morbidity, which can be observed internationally and includes lifestyle-related diseases as well as psychosocial integration and regulation disorders, chronic illnesses and developmental disorders, also applies to Austria.

An impression can be gained of the health-related behaviour and state of health of children and adolescents in Austria from the following key data:

- In 2007, 11 per cent of 6 to 15 year old schoolchildren in Austria were overweight and a further 8 per cent were obese; these figures are 50 per cent higher than in the 1990s. (Zwiauer et al. 2007)
- 20 per cent of 11 to 17 year olds exhibit indications of an eating disorder, and the trend is rising.
- In 2006, around a quarter of all babies were exclusively or predominantly breastfed for the first six months. (BMGFJ 2007b)
- Since 1990 there has been a declining trend in the percentage of children who eat fruit daily; in 2006, the percentage was only 26 to 42 per cent. (BMGFJ 2007a)
- In 2006, only around a third of boys and just under a quarter of girls said that they were physically active for at least an hour a day. Three to four per cent of 11 to 15 year olds did no physical activity at all. (BMGFJ 2007a)
- In 2006, 20 per cent of 15 year old schoolchildren stated that they smoke daily. Over the last decade, the figure has increased for girls in particular. (BMGFJ 2007a)
- 41 per cent of 15 year old boys and a third of girls of the same age regularly drink alcohol. The same percentage stated that they had been drunk at least twice in their lives. (BMGFJ 2007a)
- Between 1980 and 2006, around 15 per cent of all deaths due to injuries among 10 to 14 year olds and 21 per cent among 15 to 19 year olds were attributable to suicide, although the number of suicides decreased significantly during this period (from 110 in 1980 to 41 in 2009).
• The **mortality rate** in children and adolescents in Austria has decreased not only in the very long term but also over the last 30 years. This trend is primarily due to the decline in infant mortality and deaths in early childhood. The main causes of death for children and adolescents are accidents, diseases related to pregnancy and birth, and abnormalities.

**Approach**

The present Child Health Strategy is based on the Child Health Dialogue initiated by the Minister of Health Alois Stöger in April 2010. The aim of the Child Health Dialogue was to develop a strategy for the **sustainable improvement of the health of all children and adolescents in Austria** involving experts from science, the practical field, politics and public administration.

The Child Health Dialogue began on 28 April 2010 with a one-day event on child and adolescent health with broad participation from experts and relevant institutions. Six working groups (WGs) were subsequently formed:

- WG 1 Health promotion and structural prevention
- WG 2 Health care
- WG 3 Psychosocial health
- WG 4 Rehabilitation
- WG 5 High-risk pregnancy/birth and the consequences
- WG 6 Paediatric drugs

Key institutions and experts in the relevant topic were represented in these working groups. The Federal Ministries of Education, Social Affairs, of Family and Youth, of Sports, the Federal Ministry of Environment and the ministry of Science and Research, all Federal provinces and the Social insurance institutions, the Austrian Federal Youth Representative Council, the paediatricians, the nurses, midwives, therapists of different kinds, the psychologists, psychotherapists and other key stakeholders like the Austrian Liga for Child and Adolescent Health or the Patient Advocacy were invited and over 180 Experts followed this invitation.

They operated from May 2010 to March 2011, identified the key fields of action, analysed problems on the basis of the current situation and proposed solutions.

The main objective was to focus on health promotion and structural prevention in order to get a Health in All Policies strategy, while not forgetting the “homework” of identifying potential for improvement and feasible solutions in the participants’ own spheres of influence. In terms of the quality-assured care of sick children and adolescents, for example, structural needs and quality criteria have already been laid down in the Austrian Health Care Structure Plan (ÖSG) drawn up by the Federal Government, all federal provinces and the social insurance institutions; they are currently being implemented or are due to be quickly implemented with top priority. Further-reaching provisions in the ÖSG require the mutual agreement of the Federal Government, federal provinces and social insurance institutions.

The results of the working groups, in particular the recommendations for action, form the basis of the present Child Health Strategy.

Public awareness is already starting to increase as a result of the broad invitation to the dialogue, the large number of events and discussions and the intensive study of child health. A number of improvements have already been initiated in some areas solely due to the process.

The present Child Health Strategy consists of a total of 20 goals organised into five topic areas. Four topic areas focus on prevention and health promotion: the first topic area deals with the very broad field of the social framework (two goals), the second relates to a healthy start in life (two goals), the third topic area concerns the healthy development of children and adolescents (four goals), while
the fourth covers health equity (three goals). Goals and measures for the optimisation of care in the health system are formulated in the fifth topic area (nine goals). For each goal the background to the formulation of this goal is first explained and measures are formulated. The extent to which these measures have been implemented is given in five stages (being implemented, partially implemented, pilot projects set up, planned, recommended). To improve readability, these five stages are shown in different colours. If models of best practice exist, they are listed with each topic in a separate field and are described in more detail in Appendix B (only available in the German version).

Overall aims of the strategy

Children and adolescents in Austria are largely well off in terms of health. The majority are healthy and they are generally well looked after if they become ill. Nevertheless, room for improvement and possibilities for developing the health care system exist in a number of areas. In times when it is becoming increasingly clear that financial resources are limited, these resources must be used in the most sustainable and efficient way possible. Health promotion and prevention therefore play a particularly important role. The prevention of health risk factors and promotion of health protective factors need to be intensified and above all coordinated nationally and should be started as early as possible in order to realise their full potential. Healthy development, and thus the health equity of all children.

- Improve health equity
- Strengthen and maintain health resources
- Promote healthy development as early as possible
- Reduce health risks
- Raise awareness for “Health in all Policies”

Topic area 1: Social framework

Society provides the broad framework in which child and adolescent health tends to be either promoted and supported or hindered. The more that specific needs are taken into account and the rights of children and young people are recognised and implemented, the more child- and adolescent-friendly a society is and the more it enables children to grow up healthily. An understanding of the variety of factors that influence child and adolescent health and thus of the intersectoral responsibility for these factors is a prerequisite for a comprehensive child and adolescent health policy. This policy utilises the framework for action in all policy areas in a future-oriented and sustainable way in the interests of children and young people – and thus promotes their long-term health. Social support is one of the key protective factors for the health of children and adolescents. We must therefore continue to promote this understanding and to raise awareness of the shared responsibility for child and adolescent health in all policy areas.

Models of best practice:

- Self-evaluation model and tool for evaluating the implementation of children’s rights in hospitals
- Participation of children and young people in the Children’s Environment and Health Action Plan for Austria (CEHAPE. AT)
Goal 1: Raise awareness of the special needs of children and adolescents

Children and adolescents have special needs that are important in ensuring that they grow up healthily. As they grow into independent members of society, they need to be given the opportunity to achieve their full potential, to learn to treat themselves and their fellow citizens well and to live their lives as responsibly and healthily as possible. Since they have few opportunities to formulate and represent their concerns and interests, however, it is important that society as a whole continuously advocates listening to children and young people, communicating their needs and taking them into account. Children and adolescents need safe open spaces (also see Goal 5) where they can let off steam. They also need special protection from physical and psychological abuse; traumatic experiences in childhood often have lifelong consequences. Prevention and special attention are a prerequisite for effective child protection.

<table>
<thead>
<tr>
<th>Goal 1 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deal with the topic more explicitly and intensively in relevant training (health professionals, psychologists, educationalists, other professions relevant to child health), e.g. child advocacy (recognising and supporting the rights and needs of children and adolescents)</td>
<td>recommended</td>
</tr>
<tr>
<td>Take children and adolescents into account as a relevant target group when drawing up strategies, plans, etc. (e.g. health targets, national action plans, regional planning, housing development and traffic planning) since this approach enables more attention to be paid to their needs</td>
<td>partially implemented</td>
</tr>
<tr>
<td>Encourage participation: children and adolescents should have the opportunity to participate in and help to shape the decision-making process (e.g. in traffic and regional planning). This requires them to be provided with sufficient knowledge about the interactive effects; also see Goal 5.</td>
<td>pilot projects set up</td>
</tr>
<tr>
<td>Promote the complete implementation of children’s rights in all policy areas, in particular the articles on the right to health and children’s rights in hospital; also see the Charter of the European Association for Children in Hospital (EACH)</td>
<td>partially implemented</td>
</tr>
<tr>
<td>Include the topic of child protection in the training of all relevant professions</td>
<td>partially implemented</td>
</tr>
</tbody>
</table>

Goal 2: Raise awareness of the shared responsibility for health across policy sectors (Health in All Policies)

The health of children and adolescents and of the population in general, is affected and determined not just by individual factors but in particular by a wide range of social, socioeconomic and societal factors (“health determinants”). Improving and safeguarding health in the long term can therefore only be achieved by joint efforts across all policy areas with the aim of ensuring a health-promoting overall policy. One of the tools that supports this goal is Health Impact Assessment (HIA), an internationally established and standardised process that analyses and assesses planned (political) activities in terms of potential positive and negative effects on health and the distribution of these effects within the population (http://hia.goeg.at).
Goal 2 measures

<table>
<thead>
<tr>
<th>Activity</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise awareness of Health in All Policies among representatives of all policy areas</td>
<td>being implemented</td>
</tr>
<tr>
<td>Establish Health Impact Assessment as a practical tool for increasing the emphasis on health in a variety of policy areas</td>
<td>pilot projects set up</td>
</tr>
<tr>
<td>Continue the works on a Pilot Health Impact Assessment in cooperation with the BMG, the Main Association of Austrian Social Insurance Institutions and the federal province of Styria on the compulsory kindergarten year in order to raise awareness of child health and gain experience with the HIA tool</td>
<td>being implemented</td>
</tr>
<tr>
<td>Increase the emphasis on public health approaches (in particular Health in All Policies) in relevant education and training courses (medicine, other health and health-related professions, and education and training in other sectors, such as education, regional planning, traffic and mobility, sport, climate protection and environment)</td>
<td>partially implemented</td>
</tr>
<tr>
<td>Develop health targets for Austria. Health targets combine various aspects – from health promotion to health care topics – in a single participatory process, involving various interest groups and policy areas (Health in All Policies). There is a particular emphasis on children.</td>
<td>partially implemented</td>
</tr>
<tr>
<td>Set up a coordination unit for child health (also see accompanying measures)</td>
<td>planned</td>
</tr>
</tbody>
</table>

Models of best practice:

- **Children’s Environment and Health** Action Plan for Austria (CEHAPE.AT) – jointly managed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMFLUW) and the Federal Ministry of Health (BMG)
- **Austrian Sustainability Strategy** (ÖSTRAT), a joint orientation and implementation framework for well-coordinated measures cutting across policy areas and areas of competence; http://www.nachhaltigkeit.at/

**Topic area 2: A healthy start to life**

Important foundations for lifelong health are laid in very early childhood. Knowledge has grown significantly in recent years of the great importance of a healthy start to life. Measures that help to ensure that as many children as possible are born as healthy as possible and that they receive optimal care, support, guidance and encouragement during the first few years of their lives are therefore of central importance from a health policy perspective. Such measures are an investment in the future – the future of every single child, whose development potential is improved and who can thus enjoy a better quality of life and improved health throughout his or her life. They are also an investment in the future of society, which benefits from a healthier population and improved general welfare as well as lower treatment costs.
Goal 3: Lay the basis for a good start during pregnancy and birth

The aim of pregnancy is for a healthy woman to give birth naturally to a healthy child on or around the due date. Both children who are born prematurely and children delivered by Caesarean section potentially have health disadvantages compared to children for whom the optimal conditions are fulfilled. Premature children, for example, have an increased risk of long-term health effects beyond the first year of life; they are, for instance, at significantly higher risk of developmental disorders.

The percentage of premature births (children born before the 37th week of pregnancy) is growing in Austria. Around 8 per cent of babies were born prematurely in 1990, while the figure had increased to more than 11 per cent by 2011. This rate puts Austria at well above the European average. Causes include, in particular, the increase in multiple births (mainly due to hormone treatment and in vitro fertilisation) and also the increasing age of women giving birth, lifestyle factors (e.g. stress, smoking, alcohol), elective Caesareans and differing definitions of prematurity in Europe.

The rate of Caesarean sections is increasing and was most recently close to 30%. The World Health Organization (WHO) recommends that the Caesarean section rate should not be higher than 15 percent. Differences between the individual federal provinces, which are significant in some cases, cannot be explained by differences in patient characteristics alone. Reasons for the increasing Caesarean rates include obstetric parameters (increase in risk factors), legal reasons, the changing attitude of obstetric teams and women (increased caution, greater readiness to resort to medical intervention, ease of planning), but also midwives’ lack of experience in difficult birth situations (e.g. births where the baby is in an irregular position, such as breech presentation).

The consequences of this increase are viewed as highly problematic overall, which means that measures should be taken to counteract this increase.

<table>
<thead>
<tr>
<th>Goal 3 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduce the rate of premature births</strong></td>
<td></td>
</tr>
<tr>
<td>Produce a <strong>package of measures</strong> to reduce the rate of premature births</td>
<td>planned</td>
</tr>
<tr>
<td>Develop a recommendation by specialist bodies on the <strong>maximum number of embryos to be transferred</strong></td>
<td>being implemented</td>
</tr>
<tr>
<td><strong>Encourage single embryo transfer:</strong> legal regulation on the maximum number of embryos to be transferred</td>
<td>recommended</td>
</tr>
<tr>
<td>Develop <strong>guidelines on fertility treatment</strong>, since it increases the likelihood of multiple births</td>
<td>planned</td>
</tr>
<tr>
<td>Develop <strong>interdisciplinary standardised aftercare</strong> of premature babies throughout Austria</td>
<td>recommended</td>
</tr>
<tr>
<td>Introduce a <strong>register</strong> for the mandatory reporting of all <strong>IVF attempts</strong> carried out</td>
<td>recommended</td>
</tr>
<tr>
<td><strong>Conduct an in-depth study</strong> on prematurity</td>
<td>being implemented</td>
</tr>
<tr>
<td>Take into consideration measures for <strong>reducing multiple pregnancies</strong> in the current negotiations on IVF fund contracts</td>
<td>being implemented</td>
</tr>
<tr>
<td><strong>Reduce the Caesarean section rate</strong></td>
<td></td>
</tr>
<tr>
<td>Increase the involvement of midwives in antenatal care since midwife-led births result in fewer Caesareans</td>
<td>partially implemented</td>
</tr>
</tbody>
</table>

Models of best practice:

- **Family midwives of the city of Vienna** for improved psychosocial care and enhanced medical care during pregnancy and after the birth; easy access and free support
- **The university hospitals in Vienna and Graz** offer extensive long-term **aftercare programmes for premature children**

The percentage of premature births (children born before the 37th week of pregnancy) is growing in Austria. Around 8 per cent of babies were born prematurely in 1990, while the figure had increased to more than 11 per cent by 2011. This rate puts Austria at well above the European average. Causes include, in particular, the increase in multiple births (mainly due to hormone treatment and in vitro fertilisation) and also the increasing age of women giving birth, lifestyle factors (e.g. stress, smoking, alcohol), elective Caesareans and differing definitions of prematurity in Europe.

The rate of Caesarean sections is increasing and was most recently close to 30%. The World Health Organization (WHO) recommends that the Caesarean section rate should not be higher than 15 percent. Differences between the individual federal provinces, which are significant in some cases, cannot be explained by differences in patient characteristics alone. Reasons for the increasing Caesarean rates include obstetric parameters (increase in risk factors), legal reasons, the changing attitude of obstetric teams and women (increased caution, greater readiness to resort to medical intervention, ease of planning), but also midwives’ lack of experience in difficult birth situations (e.g. births where the baby is in an irregular position, such as breech presentation).

The consequences of this increase are viewed as highly problematic overall, which means that measures should be taken to counteract this increase.
Goal 3 measures

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a <strong>package of measures to reduce Caesarean sections</strong></td>
<td>planned</td>
<td></td>
</tr>
<tr>
<td><strong>Create transparency of the Caesarean section rate</strong> by hospital: the rate of Caesarean births is included as a quality indicator in the A-IQI (Austrian Inpatient Quality Indicator) results quality measurement project initiated by the Federal Health Commission</td>
<td>planned</td>
<td></td>
</tr>
</tbody>
</table>

**Goal 4: Lay the foundations for long-term health in early childhood**

The first years of a child’s life are a particularly sensitive stage in which – as we now know – an important basis is formed for lifelong health. Life skills, stress management and health behaviours such as eating habits are learned in early childhood. The aim of intervention in these early years is to support children and parents at as early a stage as possible in ensuring that their children are well provided for and in fostering a secure bond with them. According to the definition given by the German National Centre for Early Interventions (NZFH), “early intervention” aims to sustainably improve the development potential of children and parents within the family and society at an early stage. In addition to practical everyday support, “early intervention” is particularly intended to help improve the relationship and parenting skills of mothers and fathers (to be). A positive early parent-child relationship is a key protective factor for health. These measures benefit socially disadvantaged families to a greater extent than other families and are therefore also used to bring about social equity, which is a key factor in the overall health of a highly developed society. Vaccinations, which provide lifelong protection against diseases that can sometimes be severe, also play an important role.

**Models of best practice:**

- **Vorarlberg Family Network** – “early intervention” programme now implemented throughout Vorarlberg; [http://www.netzwerk-familie.at](http://www.netzwerk-familie.at)
- **SAFE®** – a training programme to promote a lasting bond between parents and children; [http://www.safe-programm.de/](http://www.safe-programm.de/)
- **National Centre for Early Intervention** (Germany) to support practical work in the early intervention field; [http://www.fruehehilfen.de/](http://www.fruehehilfen.de/)

Goal 4 measures

<table>
<thead>
<tr>
<th>Goal</th>
<th>Measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early intervention</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop prospective courses of action for “early intervention”: create a sustainable structure modelled on the National Centre for Early Interventions in Germany; initiate further pilot projects; transfer knowledge gained into training curricula</td>
<td>pilot projects set up</td>
<td></td>
</tr>
<tr>
<td>Lay the foundations for “early intervention”: on behalf of the Federal Ministry of Health, funding from the Federal Health Agency is being used to draw up basic principles on “early intervention”, which are intended to be used to process international evidence and experience, to survey the existing conditions in Austria and to encourage networking among key players</td>
<td>being implemented</td>
<td></td>
</tr>
<tr>
<td><strong>Vaccinations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide <strong>free vaccinations</strong> for all children up to the age of 15 against diseases of public health importance that are included in the children’s vaccination programme</td>
<td>being implemented</td>
<td></td>
</tr>
</tbody>
</table>
Goal 4 measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapt and extend the children’s vaccination programme, taking into account medical evidence (e.g. against meningococci and pneumococci)</td>
<td>being implemented</td>
</tr>
<tr>
<td>Produce a vaccination brochure to provide parents with easily accessible and understandable information about vaccinations. Distributed as part of the Mother-and-Child Record.</td>
<td>being implemented</td>
</tr>
</tbody>
</table>

**Topic area 3:**

**Healthy development**

To develop healthily, children and young people need living environments that provide them with conditions appropriate to their age. They need space to live – spaces to play and enjoy their freedom as well as designed, structured and institutionalised spaces – that enable them to grow up healthily by offering them opportunities for personal development, by supporting them in their development and efforts to gain independence, and also by facilitating and encouraging a healthy diet and physical activity. The family, home environment and settings of kindergarten, school and extracurricular youth programmes are therefore particularly important in this context. They are crucial for improving life skills and also play a key role – for children, in particular – in determining how healthy an individual’s lifestyle is. In addition to ensuring that children’s and adolescents’ living environments encourage good health and enhancing the parenting skills of their parents, coordinated and networked national prevention and health promotion measures that involve parents and the relevant settings can also play an important role in the healthy development of children and adolescents.

**Goal 5: Enhance the life skills of children and adolescents**

Life skills (such as self-perception and empathy, dealing with stress and negative emotions, communication, assertiveness and determination) are important prerequisites for a successful and healthy lifestyle and for being able to deal with life’s challenges, and thus for personal well-being. The objective of measures taken to promote life skills is to enable protective factors to be acquired that reduce the likelihood of developing behaviour under certain risk conditions that damages oneself or others in later life. The aim of all aspects of life skills promotion is to foster a positive attitude towards one’s own personality and health; it thus plays a crucial role in mental health, both generally in terms of mental well-being and specifically with regard, for example, to dealing with psychoactive substances or addictive behaviour. Parental support and a positive family atmosphere are very important here and should therefore be given particular support.

To grow up healthily, children and adolescents also particularly need a healthy living space that enables them to learn in a playful and hands-on way, to develop their motor skills and body awareness, to explore independently and to make social contacts, and provides opportunities for them to develop to their full potential. Safe spaces where children and young people can learn life

**Models of best practice:**

- Vienna “Single – Multiple” project for the creation of open spaces for children and adolescents through the multiple or interim use of land; http://www.wien.gv.at/stadtentwicklung/projekte/mehrfachnutzung/
- Open Youth Work Dornbirn offers a wide variety of activities that support young people (including youth clubs, work and education projects, a skate park, youth projects on climate protection, and mobile and outreach youth work); http://ojadweb.ojad.at
skills, try them out on and with each other, and develop these skills play a key role. However, the constructed space in which children and adolescents are allowed to move freely and the needs-based support offered by extracurricular youth programmes with their wide range of activities are also important, particularly for children and adolescents from socially disadvantaged families and/or living in particularly adverse conditions. Sports clubs, which are further addressed in Goal 7, play an important role in conveying life skills.

<table>
<thead>
<tr>
<th>Goal 5 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Create or maintain safe open spaces for children and adolescents</strong></td>
<td></td>
</tr>
<tr>
<td>Strengthen the participation of children, adolescents and parents in the design of their living environments, e.g. in traffic planning, urban and community planning (also see Goal 1)</td>
<td>pilot projects set up</td>
</tr>
<tr>
<td>Increase the number of open spaces and play areas available through multiple or interim use of (public) land and by opening or converting school and sports fields etc. for children and adolescents</td>
<td>pilot projects set up</td>
</tr>
<tr>
<td>Establish/promote the position of “open space coordinators” modelled on the Vienna “Single – Multiple” project (see Models of best practice)</td>
<td>pilot projects set up</td>
</tr>
<tr>
<td>• Define responsibilities in municipalities and regions</td>
<td></td>
</tr>
<tr>
<td>• Make the knowledge gained by the project leaders available to others</td>
<td></td>
</tr>
<tr>
<td>• Provide training courses</td>
<td></td>
</tr>
<tr>
<td><strong>Enhance parenting skills</strong></td>
<td></td>
</tr>
<tr>
<td>Promote high-quality parent education, in particular by:</td>
<td>being implemented</td>
</tr>
<tr>
<td>• securing the financial support of non-profit organisations that carry out parent education projects in line with the quality criteria laid down by the Federal Ministry of Economy, Family and Youth (BMWFJ),</td>
<td></td>
</tr>
<tr>
<td>• organising “training courses for parent trainers” based on the curriculum developed by the BMWFJ, and by</td>
<td></td>
</tr>
<tr>
<td>• providing information</td>
<td></td>
</tr>
<tr>
<td><strong>Strengthen and support the health promotion function of extracurricular youth programmes</strong></td>
<td></td>
</tr>
<tr>
<td>Health toolbox: with the involvement of potential users (e.g. bOJA [centre of competence for Open Youth Work in Austria], youth work associations) und in cooperation with the BMWFJ, the Federal Ministry of Health will compile a toolbox for people who work in extracurricular youth programmes</td>
<td>planned</td>
</tr>
<tr>
<td>(Further) training for youth workers focusing on health promotion, exercise, improving life skills, mental health and preventing abuse</td>
<td>pilot projects set up</td>
</tr>
</tbody>
</table>

---

**Goal 6: Use education positively as a key factor influencing health**

Education has a major influence on our health: it increases the chances of a higher income and better living conditions and has a positive effect on our health as a result. Regardless of this, however, education is also an important resource for our health because it affects health-related attitudes and behaviours. Kindergartens and schools are the principal providers of education as well as being an
Models of best practice:

- **B.A.S.E.® – Baby watching in kindergarten** – observing babies to promote empathy and sensitivity and to combat fear and aggression; http://www.base-babywatching.de/
- **Healthy School initiative** to promote health in schools and thus create conditions for healthy teaching and learning; http://www.gesundeschule.at/
- **Albatros** – a new interactive form of learning for lower secondary school leavers offered by Open Youth Work Dornbirn

School has a strong influence on health-related behaviour and in the best cases can make up for deficits at home, helping to reduce life and health inequalities. On the other hand, it can also lead to stress and anxiety, which have a negative impact on children’s and adolescents’ health.

### Goal 6 measures

| Focus on health promotion in nurseries and kindergartens, based on experiences from the Healthy Kindergarten (pilot) projects currently underway or already completed in Austria | pilot projects set up |
| Focus on health promotion in schools by the Federal Ministry of Education, Arts and Culture (BMUKK) based on existing measures in the national Healthy School initiative and in line with the goals of the BMUKK in terms of the further development of health promotion in schools, in particular focusing on school development to ensure health-promoting organisational development | being implemented |
| The BMUKK will promote the expansion of all-day schooling, taking into account health promotion requirements | being implemented |
| Promote and network activities related to integrating young people with impairments into the job market (job trainers and education coaches) | being implemented |

### Goal 7: Enable and encourage children and adolescents to physical exercise

Exercise and physical activity are very important factors affecting how healthily a child grows up. Many children do not get sufficient exercise however, particularly as they get older, since even among children a sedentary lifestyle is already widespread. Exercise habits are particularly poor among children and adolescents from socially disadvantaged backgrounds. It is therefore extremely important to encourage any kind of sport or exercise. Since the competitive nature of many sports clubs does not appeal to all children, however, both everyday exercise and non-competitive sport must be encouraged for ALL children and adolescents. It would be highly advantageous if sports clubs were to extend the range of non-competitive sports that they offer, especially as these clubs also...
fulfil a significant social function in addition to the very important opportunities for exercise that they provide.

Models of best practice:

- **Healthy & happy at primary school**: exercise diary produced by the BMUKK for teachers, pupils and parents
- **Keeping children on the move**: support for kindergartens and primary schools in encouraging children to exercise
- One of the priorities of the Children’s Environment and Health Action Plan for Austria is to ensure that children get enough physical activity through child-friendly urban and traffic planning
- **Master Plan Cycling – klima:aktiv mobil**: focus on young people in the klima:aktiv mobil programme “Mobility management for tourism, leisure and young people”

<table>
<thead>
<tr>
<th>Goal 7 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Take into account the specific needs</strong> of children and adolescents in the National Action Plan on Physical Exercise (NAP.b), which is currently being jointly developed with the broad participation of relevant institutions from the sports and health ministries following a resolution of the Council of Ministers in March 2011</td>
<td>being implemented</td>
</tr>
<tr>
<td><strong>Encourage more exercise in everyday life</strong></td>
<td></td>
</tr>
<tr>
<td>Increase <strong>safety on routes to school</strong> that are taken by pupils “on the move” (walking, cycling, scooter, etc.)</td>
<td>being implemented</td>
</tr>
<tr>
<td>Improve the <strong>cycling infrastructure</strong>, such as the network of cycle paths and the number of bicycle stands, in line with the Austrian Cycling Master Plan</td>
<td>being implemented</td>
</tr>
<tr>
<td>Promote <strong>everyday mobility that encourages young people to take exercise</strong> and create mobility options for leisure time that are suitable for young people as part of klima:aktiv mobil</td>
<td>being implemented</td>
</tr>
<tr>
<td>Provide <strong>alternatives to private transport that encourage exercise</strong> on school routes that are shorter than approximately two kilometres (e.g. walking buses)</td>
<td>pilot projects set up</td>
</tr>
<tr>
<td><strong>Encourage mobility management</strong> for schools and kindergartens as part of klima:aktiv mobil</td>
<td>being implemented</td>
</tr>
<tr>
<td>Promote the implementation of the Children’s Environment and Health Action Plan for Austria (CEHAPE)</td>
<td>being implemented</td>
</tr>
<tr>
<td><strong>Encourage opportunities for exercise in kindergartens and schools</strong></td>
<td></td>
</tr>
<tr>
<td>Ensure that kindergartens and schools <strong>focus on encouraging exercise</strong></td>
<td>pilot projects set up</td>
</tr>
<tr>
<td>Introduce <strong>specific exercise programmes</strong> in kindergartens and schools</td>
<td>pilot projects set up</td>
</tr>
<tr>
<td><strong>Promote exercise activities in leisure time</strong></td>
<td></td>
</tr>
<tr>
<td>Facilitate access to sports clubs for children and adolescents, with priority being given to increasing the range of <strong>non-competitive sports</strong>. Consideration should be given, for example, to setting up a <strong>joint website for providers</strong> of non-competitive sports on which a simple search form can be used to find an exercise programme that is suitable for a particular individual.</td>
<td>recommended</td>
</tr>
</tbody>
</table>
Goal 8: Encourage healthy eating in children and adolescents

A healthy diet has a fundamental impact on our health and well-being. For children and adolescents, there is the additional factor that the appropriate composition of meals is particularly important during the growth phase when numerous bodily functions (e.g. the immune system, bone development, mental performance) are developing. A healthy diet, which includes plenty of fruit and vegetables and only small amounts of foods high in fat, sugar and salt, can reduce the risk of many diseases. Breast milk is the ideal food for infants, with breastfeeding also having positive effects on the relationship between mother and child and thus a positive impact on health.

<table>
<thead>
<tr>
<th>Goal 8 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement as widely as possible the measures recommended in the National Action Plan on Nutrition (NAP.e) for the target group of children and adolescents, in particular activities related to the food available in kindergarten and school canteens (including drinks)</td>
<td>being implemented</td>
</tr>
<tr>
<td>Implement as widely as possible the measures recommended in the package of measures Eat right from the Beginning (Richtig Essen von Anfang an, REVAN), particularly activities that encourage healthy eating in early childhood (including breastfeeding)</td>
<td>being implemented</td>
</tr>
<tr>
<td>Increase the number of baby-friendly hospitals (Baby-friendly Hospital Initiative)</td>
<td>being implemented</td>
</tr>
</tbody>
</table>

**Focus on children’s eating habits in the nationwide preventive care strategy:**
A raft of measures promoting healthy eating in children will be taken by the Federal Government, federal provinces and social insurance organisations using means from the Federal Health Agency from 2011 to 2013.

These measures focus on:
- Nutritional advice during pregnancy and after birth
- Canteens in kindergartens and schools
- Expansion of the Baby-friendly Hospital Initiative (see above)

Topic area 4: Health equity

Not all children and adolescents have the same health opportunities. As early as childhood and adolescence, children and young people from socially disadvantaged families (single parents, low level of education, low income, migrant background, etc.) are often in poorer health and suffer more frequently from psychological problems than their peers from higher-income and educated families. Social inequity in health is evident not just in the case of absolute poverty (in the sense of material deprivation), but also in the case of relative deprivation compared with the average standard of living in the society in which one lives. Social inequality entails differing demands on health services (balance of health resources and health care needs), differing health care and differing health-related lifestyles. Overall, this results in health inequality. Children and adolescents with disabilities and
other health problems (chronic illnesses, developmental disorders or delays) are often at a health disadvantage from birth. Specific funding and support programmes – particularly in the health and social services sector, but also in education for example – and early detection measures combined with targeted support can play an important role in reducing health inequality for both groups.

**Goal 9: Promote health equity for socially disadvantaged groups**

Children and adolescents from socially disadvantaged families (single parents, low income, low level of education etc. of the parents) frequently also have health problems. Poverty in children, for example, is often reflected in poorer mental and physical health and in lower educational achievement in childhood as well as in an increased risk of poverty and thus poorer health in adulthood. Furthermore, it is more difficult for socially disadvantaged groups to access health services (both prevention and care).

The psychosomatic effects are particularly relevant, since social inequality is often linked to chronic stress due to the lack of essential “ingredients” such as self-efficacy, sustainable relationships, recognition and respect (Schenk 2011). Children and adolescents from single-parent families and from families with a dual migrant background are very often affected by poverty and social disadvantage.

**Models of best practice:**

- **Health is coming home** – a comprehensive outreach programme for socially disadvantaged female migrants (mothers and grandmothers) from a predominantly Muslim cultural background; www.gekona.at

- **Neighbourhood mothers** (Germany) – local projects to encourage and raise awareness among parents, promote communication between day care centres and parents, and provide access to families with a migrant background; http://www.stadtteilmuetter.de/

### Goal 9 measures | Status
--- | ---
Develop **strategies to improve accessibility and support for socially disadvantaged groups**, in particular by improving **access to the social services and support programmes available** (increase publicity for the Federal Ministry of Labour, Social Affairs and Consumer Protection website and the “**social telephone**”), by providing **easy access** (e.g. kindergarten, outreach programmes, supermarket) and by increasing cooperation and networking between the key players (especially between youth welfare and health care facilities) | partially implemented

Introduce measures to **improve accessibility and support for migrants**, e.g. work with migrants who work in health promotion (disseminators); provide “interpreters” (who understand the language and culture) for dealing with authorities, visits to the doctor, etc. in connection with children; use native speakers and culturally integrated individuals as “family coaches”; increase the number of therapists with a migrant background | pilot projects set up

**Make it easier** for children and adolescents from low-income families to **access** inpatient care by removing the patient’s contribution for children and young people and allowing an accompanying person to stay free of charge (excluding meals) | recommended
## Goal 9 measures

| Ensure systematic provision of quality-assured and easy-to-understand information about healthy lifestyles and the procedure when problems arise for parents of all educational levels | partially implemented |
| “Our baby is coming” brochure accompanying the Mother-and-Child Record making it easier for parents to access information about pregnancy, birth and the first year of life | being implemented |

## Goal 10: Promote equal opportunities for children and adolescents with health problems

Children and adolescents with health problems such as disabilities, chronic illnesses, (temporary) developmental disorders or delays often face a range of additional obstacles related to their health problems which make their daily life and social integration more difficult. They need both special support for their health issues and increased assistance with social participation. Their parents also require a high level of expert support with their particularly difficult task.

## Models of best practice:

- **Vienna Early Support**: outreach support programme (free of charge) for developmentally delayed and disabled children aged between 0 and 6 years; http://www.wiso.or.at/foebe/mob.php
- **Outpatient clinics run by the VKKJ** (Responsibility and Competence for Special Children and Adolescents) offer a wide range of programmes for the diagnosis and therapy of disabled children; http://www.vkkj.at/
- **WGKK (Vienna Health Insurance Agency) Centre of Competence for Integrated Health Care**

## Goal 10 measures

| Increase family allowance (double the child allowance) if a child has a significant disability or there is a permanent inability to engage in employment (BMWFJ proceedings). This is determined by medical assessment at the Federal Social Welfare Office. An assessment order corresponding to the state of the art in diagnosis and therapy was introduced in September 2010. | being implemented |
| Provide a sign-language interpreter to assist the deaf with administrative matters | being implemented |
| Improve access to the social services and support programmes available via social services for families with disabled children who have significant health problems (increase publicity for the Federal Ministry of Labour, Social Affairs and Consumer Protection website and the “social telephone”) | partially implemented |
Goal 10 measures

**Increase the number of day care facilities for children with special needs:** there are currently insufficient day care facilities for disabled and chronically ill children. Particular attention should therefore be paid to this target group when extending the day care available (especially kindergartens and playgroups).

**Continue to expand sociopaediatric centres** for the diagnosis and support of disabled and chronically ill children and adolescents and children with developmental disorders or delays

For further suggested measures see Goals 15 and 16

Goal 11: Improve early detection and targeted support for children and adolescents

Early detection of (health) problems enables early support to be provided through targeted approaches and therefore improves the success of prevention and treatment. A variety of early detection programmes, only some of which are standardised nationwide programmes, are available for different age groups in Austria. Since people from socially disadvantaged groups often do not take advantage of these programmes, consideration should be given to ways of reaching these groups more effectively and making the programmes more accessible. Moreover, there is no standardised nationwide documentation or processing of the data on uptake and epidemiological results. For additional details, see accompanying measures.

### Goal 11 measures

| **The Federal Ministry of Health is working on the reorientation of the Austrian parent-child preventive care programme**; preliminary groundwork has already been commissioned | being implemented |
| Introduce standardised check-ups for the **early detection of specific educational needs in kindergarten**: this check-up should take place at the latest when the child is enrolled for the obligatory kindergarten year so that there is still time for assistance to be provided before he or she starts school | recommended |
| Develop a **school health** concept involving the relevant professional groups (doctors, psychologists, social workers, teachers, parents, pupils, etc.) and taking into account significant international experience | recommended |

**Models of best practice:**
- School entry check-up in St. Veit an der Glan
- A variety of studies in kindergartens in individual federal provinces

Topic area 5: Care of sick children and adolescents in specific areas

The care of sick children and adolescents is assured in Austria. That said there is a need for
optimisation and, in some cases, extended provision in a number of specific areas. For instance, parents and relatives must have sufficient access to information that advises them whom they should consult in the event of acute illness or an emergency so that they do not go to the wrong place and time is lost unnecessarily.

Within the health system itself the most important concern is to assure sufficient paediatric expertise, child-appropriate drugs and a child-appropriate environment in all settings in which children and adolescents are cared for and treated. An optimal care chain furthermore requires that the various care establishments and all professional groups cooperate optimally across all disciplines and that processes are standardised and function smoothly.

The requirement for extended provision regarding the care of children and adolescents is still apparent in individual areas, parts of this requirement having already been agreed in the Austrian Health Care Structure Plan (ÖSG). Again, some measures are already being implemented; others must be accorded higher priority.

A major challenge in Austria is the integrated care of child and adolescent psychiatric illness patterns and the care of children and adolescents requiring therapy, particularly in conjunction with “modern morbidity”. The present strategy seeks to prevent illnesses of this kind from the outset as far as possible, but if they do occur, the care options in Austria still differ greatly at regional level with regard to both the range of services and the costs for the parents associated with the necessary treatment. The goals outlined below pertaining to the care of sick children and adolescents are also intended to prevent negative influences on optimal care resulting from social status or health inequalities.

The **Austrian Health Care Structure Plan** is the mandatory basis for the integrated planning of the Austrian health care structure in accordance with an agreement concluded between the Federal Government and all federal provinces (BGBl [Federal Law Gazette] I 2008/105). It constitutes the framework planning for detailed planning at regional level – in particular for the Regional Health Care Structure Plan (RSG). The ÖSG was agreed upon for the first time in 2006 as a framework plan for an integrated health care structure. The third, extended version, ÖSG 2010, with a planning horizon of 2020, applies at present.

**Goal 12: Optimise outpatient primary care and improve same in the early morning and late evening and at weekends**

In principle, a distinction is made between care in an emergency and the requirement for treatment in the event of acute illness, particularly at weekends and in the early morning and late evening. Care provided by non-hospital-based paediatricians differs greatly at regional level and they often have limited opening hours. This does not meet the needs of the families and leads to long waiting times and/or that paediatric outpatient clinics for acute illness/emergencies are used for cases other than those of medical necessity.

The population has an understandable need for rapid and comprehensive assessment that is available at all times, but does not have sufficient decision-making authority as to whether someone should be contacted in the event of acute illness and, if so, whom. An extension of this parental authority may be possible in conjunction with the Mother-and-Child Record, as well as in the form of easily accessible quality-assured information, e.g. on websites. The establishment of a child emergency hotline offering paediatric expertise comparable to the emergency medical service designed primarily for adults would be conceivable.
Goal 12 measures

| Ensure **transparency across the services currently available** in the non-hospital-based sector, e.g. on the Internet | recommended |
| Better information for parents as to whom they can consult, particularly through the provision of easily understandable and easily accessible information in several languages regarding contact partners and responsibilities and, for instance, through the establishment and promotion of a **(child) emergency hotline** | recommended |
| Development of regionally adapted solutions for care provided by (non-hospital-based) paediatricians in the early morning and late evening and at weekends, for instance through the assurance of longer and/or staggered opening times of consultants’ surgeries in a region or through the organisation of a paediatric emergency service, from central paediatric drop-in surgeries or increased paediatric expertise in so-called emergency medical service surgeries or extended resources in paediatric outpatient clinics in hospitals | recommended |

Goal 13: Strengthen paediatric expertise in emergency care

Emergencies among children and adolescents present a particular challenge for any health system in view of the diversity of possible illnesses and the given physiological and anatomical special characteristics and the psychological, emotional and communicative attributes of the individual age groups. On the whole, paediatric emergency care in Austria functions well and effectively. However, there is potential for improvement with regard to the initial appraisal of emergency cases and efficient transfer to specialised centres in which optimal medical care is assured. The early identification of abuse or neglect of children and adolescents is (in conjunction with emergency cases) furthermore a key concern.

Goal 13 measures

| Consolidated paediatric training regarding emergencies and/or refresher courses for doctors and nursing staff who work in rescue/emergency doctor systems and for all doctors who work with minors, e.g. in conjunction with refresher courses for emergency doctors (every four years at least) or simulation training courses | recommended |
| Improve the rapid and efficient transfer of patients from initial contact to the correct treatment units/establishments on the basis of international standards and as a result of specialist training courses | recommended |
| Identify paediatric emergency medical centres with the effective anchoring of doctors with paediatric expertise in these centres | recommended |
| Definition and nationwide planning of competence centres for specialised paediatric emergency care in the ÖSG, e.g. for children with severe burns, with traumatic brain injury or in the case of drowning accidents | recommended |
| Extend the participation of child protection groups currently anchored in the law to all doctors and nursing staff involved in child and adolescent care through obligation and/or incentive (e.g. via continuing professional development centres) | recommended |
Goal 13 measures | Status
---|---
**Networking of information** on conspicuous circumstances (e.g. more frequent treatment due to injuries, etc. that could be attributable to abuse or neglect) between the individual hospitals with adherence to data protection regulations | planned

For improved **networking in the case of suspected child abuse**, the 15th Amendment to the Ärztegesetz (Austrian Medical Act), which was under evaluation in spring 2011, envisages a relaxation of the obligation to observe confidentiality in medical matters vis-à-vis other doctors and hospitals | being implemented

---

Goal 14: Improve the child-friendliness of care in hospitals

Models of best practice:

The self-evaluation model and the **tool for evaluating the implementation of children’s rights** in hospital also support the child-appropriate development of inpatient care (also see Goal 1); www.hphnet.org

Care in hospitals is not always aligned to the needs of children and adolescents. In hospitals without paediatric wards, children and adolescents are frequently looked after on adult wards, which lack child-specific care (medical and nursing staff) and the correct environment. The Charter of the European Association for Children in Hospital (EACH Charter, Article 6(2); also see the goal relating to children’s rights) also stipulates that children should not be admitted to adult wards.

The patient’s contribution in the case of hospital stays (hospital costs contribution) can furthermore lead to a heavy financial burden for the parents, particularly in the case of a low income and/or in the case of premature babies, multiple births, chronically sick children, disabled children and children who have to stay in hospital at the turn of the year. Inpatient treatment for children is always highly stressful and should therefore be kept to an absolute minimum. Day clinic treatment is a child-appropriate form of inpatient care, but owing to the absence of the requisite structures is frequently administered on adult wards. This impedes optimal patient-oriented processes and means that the potential of day clinic care is not exploited.

Goal 14 measures | Status
---|---
**Child-appropriate provision of inpatient care** in hospitals without a paediatric ward through the establishment of dedicated children’s areas; assure nursing provided by qualified personnel with paediatric expertise; assure regular paediatric consultant care and sufficient capacities for accompanying persons | partially implemented

**Expand/improve the infrastructure for accompanying persons** (e.g. sufficient free-of-charge/inexpensive accommodation in the hospital or nearby) and **no invoicing of costs for accompanying persons** (except meals) | recommended

**Remove the “patient’s contribution”** for babies, children and adolescents in the event of a hospital stay | recommended

**Restructure bed utilisation through the deliberate promotion of paediatric day clinic structures**, particularly for the chronically sick, scheduled operations and scheduled bundled diagnostic assessment | recommended
### Goal 14 measures

<table>
<thead>
<tr>
<th>Goal 14 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work towards the participation of children in the hospital; depending on their level of development, children can be involved in decisions that affect them</td>
<td>recommended</td>
</tr>
</tbody>
</table>

### Goal 15: Improve care in selected areas (child and adolescent psychiatry, psychosomatics, neuropaediatrics, sociopaediatrics)

Regulations on child and adolescent psychiatry were integrated in the Austrian Health Care Structure Plan (ÖSG) for the first time in 2008. They serve as a guideline for the establishment and development of inpatient child and adolescent psychiatry and with regard to improved care and the increased training of consultants in this area. The latter is the prerequisite for the expansion of outpatient child and adolescent psychiatric care planned for the longer term.

The goal is to ensure the multidisciplinary care of all mentally ill and highly stressed children and adolescents, regardless of social status, through the country-wide, tiered and free provision of consultant care, psychological therapy, psychotherapy and functional therapy (occupational therapy, physiotherapy, logopaedics, etc.) in conjunction with child- and adolescent-specific training and expertise. It is furthermore necessary to also take account of the family situation (parent-child relationship) and to systematically involve the parents in the treatment. This applies in particular to cases where the parents or one parent obviously suffer(s) from mental illness, as it is well known that there is a significantly higher risk that children/adolescents with a family background of this kind will become mentally ill themselves.

Somatic symptom disorders with a mental background and a series of mental illness patterns in children and adolescents often do not require child and adolescent psychiatric intervention, but instead can be optimally treated in psychosomatic care units specialising in children and adolescents. The establishment and development of psychosomatic care for children and adolescents has been agreed in the ÖSG for this reason. That said, the level of implementation in Austria is still insufficient and regionally unbalanced.

### Goal 15 measures

<table>
<thead>
<tr>
<th>Goal 15 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child and adolescent psychiatry</td>
<td></td>
</tr>
<tr>
<td><strong>Rapid development of child and adolescent psychiatric inpatient care structures</strong> in line with ÖSG requirements</td>
<td>being implemented</td>
</tr>
<tr>
<td><strong>Enactment of an act temporarily suspending specific specialism requirements</strong> in order to increase the training capacity in child and adolescent psychiatry by Federal Minister of Health Alois Stöger with the goal of fully exploiting the available training capacities for child and adolescent psychiatric consultants at all facilities</td>
<td>being implemented</td>
</tr>
</tbody>
</table>

### Models of best practice:

**Centre for Mental Health** in Eisenstadt: comprising a multi-professional team of doctors, psychologists, social workers, qualified carers and nurses as well as physiotherapists and occupational therapists; an outpatient service without charge specifically for children and adolescents; the centre also houses the organisational headquarters of the Psychosocial Service, the pro mente Burgenland association, the Burgenland Addiction Unit and the Institute of Addiction Prevention.
Goal 15 measures

<table>
<thead>
<tr>
<th><strong>Goal 15 measures</strong></th>
<th><strong>Status</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop capacities for basic care through non-hospital-based consultants and assure multidisciplinary comprehensive care in cooperation with non-hospital-based therapists with child-specific training and/or in interdisciplinary outpatient clinics</td>
<td>recommended</td>
</tr>
<tr>
<td>Networking and cooperation of all participating services and structures such as health promotion, prevention, crisis management, addiction treatment, rehabilitation, establishments for treating children and adolescents with complex multiple disorders, youth welfare organisations</td>
<td>recommended</td>
</tr>
<tr>
<td><strong>Psychosomatic care</strong></td>
<td>being implemented</td>
</tr>
<tr>
<td>Rapid regionally balanced ongoing establishment and development of the psychosomatic care provision in accordance with the ÖSG</td>
<td></td>
</tr>
<tr>
<td><strong>Neuropaediatric care</strong></td>
<td>recommended</td>
</tr>
<tr>
<td>Develop an overall concept for neuropaediatric care in Austria and its inclusion in the ÖSG</td>
<td></td>
</tr>
<tr>
<td>Establish neuropaediatric clinics in the three public university hospitals at least</td>
<td>recommended</td>
</tr>
<tr>
<td><strong>Sociopaediatric care</strong></td>
<td>recommended</td>
</tr>
<tr>
<td>Country-wide expansion of developmental and sociopaediatric care</td>
<td></td>
</tr>
</tbody>
</table>

For further suggested measures see Goal 16

Goal 16: Improve integrated care of “modern morbidity”

The risk factors for health and development and the modern morbidity of children and adolescents have changed. Increases in the following have been observed internationally:

- lifestyle illnesses
- chronic developmental disorders
- psychosocial integration and regulation disorders
- the continuing disadvantaged situation of remote rural regions and specific social groups

Models of best practice:

- Outpatient clinics for developmental neurology and sociopaediatrics in Vienna
- aks Vorarlberg as the central provider of various treatments and therapies for children and adolescents

In Austria, the availability of integrated care services differs very widely at regional level. Overall there is presumed to be a quantitative lack of the relevant services, particularly for the therapeutic treatment (medical-psychological, functional and psychotherapeutic) of children and adolescents with developmental problems and/or an intervention requirement. The appertaining data pools are insufficient with the result that it is not possible to make concrete Austria-specific statements regarding the care requirement and provision.

Child health is an interdisciplinary topic and must be accorded greater priority overall and integrated in the political decision-making process of all government ministries (also see Goal 2: Health in All Policies).
### Goal 16 measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved data and information collection on therapy requirements and the therapy provision, in particular through:</td>
<td>planned</td>
</tr>
<tr>
<td>• Examination of the feasibility of surveying key data in conjunction with an electronic Mother-and-Child Record (in the context of the development of the proposed overall concept for preventive care measures for children and adolescents; see Goal 12)</td>
<td></td>
</tr>
<tr>
<td>• Mandatory registration of health professions other than the profession of doctor as a requirement for being authorised to practice</td>
<td></td>
</tr>
<tr>
<td>Survey the requirement for and range of outpatient therapies (occupational therapy, psychotherapy, physiotherapy and logopaedics) among children and adolescents</td>
<td>being implemented</td>
</tr>
<tr>
<td>Develop an integrated overall care and treatment plan with integration of the health, welfare and education systems, differentiated according to life phases with age-appropriate settings and transitions</td>
<td>recommended</td>
</tr>
<tr>
<td>• Detailed analysis of the current situation</td>
<td></td>
</tr>
<tr>
<td>• Requirements-based development of tiered care services</td>
<td></td>
</tr>
<tr>
<td>Assure sufficient, quality-assured, country-wide outpatient therapeutic care by means of a multi-professional network of institution-based and non-hospital-based therapists with child-specific training and/or further training</td>
<td>recommended</td>
</tr>
</tbody>
</table>

For further suggested measures see Goal 10

### Goal 17: Align neonatal care to the changed demographic circumstances

In view of the risk factors for premature babies, prevention in this area has top priority (also see Goal 3). Neonatal care capacities have been extended in recent years and the number of facilities and beds has increased.

That said, however, during the same period, the ratio of premature babies has risen proportionally more quickly than care capacities have been extended, and the survival rate of extremely small premature babies has further increased. As a result, neonatal intensive care wards are very busy at all times and capacity problems recur. The literature confirms that the mortality rate rises if quantitative and qualitative staffing is insufficient and the capacity utilisation level of neonatal intensive care wards is disproportionately high. Quality attributes are a capacity utilisation of no more than 80 per cent on average and sufficient quantitative and qualitative staffing.

### Goal 17 measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examine the neonatal care units on the basis of international evidence-based standards (with regard to capacity utilisation and staffing) and align if required. Any alignment measures must be examined with regard to international population-based comparable figures.</td>
<td>recommended</td>
</tr>
<tr>
<td>Develop and improve the infrastructure for accompanying persons</td>
<td>recommended</td>
</tr>
</tbody>
</table>


Goal 18: Improve the rehabilitation provision for children and adolescents

The personal, societal and economic value of rehabilitation among children and adolescents is undisputed. Serious illness or accidents among children and adolescents place an extreme burden on those affected and their families. Rehabilitation of sufficient quality improves the state of health and has a positive influence on the quality of life, the ability to develop and the opportunities for living a long and independent life. In Austria, however, there is not currently an individually enforceable legal entitlement to the rehabilitation of children and adolescents.

The rehabilitation of children and adolescents has specific requirements that distinguish it from the rehabilitation of adults. Alongside consideration of specific needs (daily routine, living space layout, educational and leisure opportunities, the assistance of a close friend or relative, etc.), family-oriented rehabilitation – i.e. the concurrent treatment of family members – is highly important. The development of a specialist, child- and adolescent-appropriate provision for outpatient and inpatient rehabilitation is required in the first instance, and a statutory ruling on this matter can be additionally considered.

**Family-oriented** rehabilitation concerns the rehabilitation of the sick child/adolescent together with their parents and siblings. Often, the family suffers from mental, psychiatric and psychosomatic disorders due to the serious or acutely life-threatening illness of the child. Family-oriented rehabilitation has a stabilising effect on the family and enables the children affected to be integrated into an education system and subsequently guided towards professional or vocational training.

### Goal 18 measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish a legal entitlement to the rehabilitation of children and adolescents</td>
<td>recommended</td>
</tr>
<tr>
<td>Stipulate <strong>competences regarding the processing of applications</strong> for child and adolescent rehabilitation; acceptance of applications at all offices of social insurance organisations and forwarding to the defined competent departments</td>
<td>recommended</td>
</tr>
<tr>
<td>Adapt the existing <strong>application form</strong> for rehabilitation with regard to the specific characteristics of family-oriented rehabilitation</td>
<td>recommended</td>
</tr>
<tr>
<td>Establish <strong>rehabilitation information services</strong> as open-door, central offices for information on and the organisation of rehabilitation services</td>
<td>recommended</td>
</tr>
<tr>
<td>Gradually expand the provision of rehabilitation for children and adolescents taking account of regional requirements and in accordance with coordinated quality standards and the quantitative requirement according to the current requirements appraisal by the ÖBIG (translated title: Rehabilitation of children and adolescents in Austria; Papers on the requirements appraisal, Vienna 2010)</td>
<td>recommended</td>
</tr>
</tbody>
</table>

Goal 19: Assure paediatric nursing and expand the children’s hospice provision and palliative care

Child-appropriate nursing care requires a sufficient number of qualified nursing staff with paediatric expertise. In the inpatient sector, a deficit in this area has become apparent in recent years, and is illustrated for example by the fact that vacancies cannot be filled in many cases. Furthermore, not all federal provinces have a mobile nursing provision for children and adolescents. In particular, there is also a lack of mobile palliative care and a hospice provision for children and adolescents. In addition
to quantitative requirements, there is in particular also the necessity of defining mandatory (structural) quality criteria on the basis of elementary care standards for the children’s hospice provision and paediatric palliative care.

**Family health nurses** offer a service providing, amongst other things, advice and support relating to prevention and health promotion, the early identification of potential and current health problems and advice and assistance in the context of social health factors. Family health nurses also act as intermediaries vis-à-vis the general practitioner and other health and social professions in matters of case management, and, if required, help families to navigate adjacent areas such as welfare offices and job centres. Through local visits for example, the intention is to facilitate access to the welfare and health systems, particularly for socially disadvantaged groups; http://www.familiengesundheitspflege.de/

### Goal 19 measures

<table>
<thead>
<tr>
<th><strong>Paediatric nursing</strong></th>
<th><strong>Children’s hospice provision and paediatric palliative care</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Survey requirements for paediatric nursing staff by means of a nursing staff requirements study</strong></td>
<td><strong>Requirements study on palliative care and the children’s hospice provision for children and adolescents for Austria</strong></td>
</tr>
<tr>
<td>planned</td>
<td>recommended</td>
</tr>
<tr>
<td><strong>Examine the feasibility of open-door support services for families with (chronically) sick children, e.g. by means of family health nurses</strong></td>
<td><strong>Develop standards and (structural) quality criteria for the children’s hospice provision and paediatric palliative care at national level and their anchoring in the ÖSG</strong></td>
</tr>
<tr>
<td>recommended</td>
<td>recommended</td>
</tr>
<tr>
<td><strong>Evaluate nursing training courses</strong></td>
<td><strong>Expand the mobile children’s hospice provision and paediatric palliative care, possibly in conjunction with reform pool projects</strong></td>
</tr>
<tr>
<td>being implemented</td>
<td>recommended</td>
</tr>
</tbody>
</table>

### Goal 20: Improve the availability of child-appropriate drugs

Over half of the drugs conventionally used in paediatrics have not been sufficiently tested with respect to children. Side-effects occur twice as frequently if drugs that have not been expressly approved for children are used. Clinical research is vital and a priority in the EU. In Austria, a network is required in order to implement studies involving paediatric patients quickly and efficiently.
Goal 20 measures

Develop a model for a child research network involving the BMG, the Federal Ministry of Science and Research (BMWF), the Austrian Association of Child and Youth Medicine (ÖKGJ), industry, social insurance institutions, the respective universities and the participating academic departments. Model content: development and coordination, funding breakdown, systematic fund-raising and success monitoring. Ensure basic funding of approx. 500,000 euros per year for a period of five years

For a period of five years, the BMG is supporting the establishment of a network for research into drugs for children and adolescents (child research network).

<table>
<thead>
<tr>
<th>Goal 20 measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a model for a child research network involving the BMG, the Federal Ministry of Science and Research (BMWF), the Austrian Association of Child and Youth Medicine (ÖKGJ), industry, social insurance institutions, the respective universities and the participating academic departments. Model content: development and coordination, funding breakdown, systematic fund-raising and success monitoring. Ensure basic funding of approx. 500,000 euros per year for a period of five years</td>
<td>recommended</td>
</tr>
<tr>
<td>For a period of five years, the BMG is supporting the establishment of a network for research into drugs for children and adolescents (child research network).</td>
<td>being implemented</td>
</tr>
</tbody>
</table>

Implementation/accompanying measures

A strategy is only as good as it is effective. Many of the goals and measures cannot be implemented by means of a single resolution; rather, their implementation requires ongoing support, monitoring and evaluation. It is for this reason that a unit is being established that coordinates both activities within the Federal Ministry of Health and cooperation with the other government ministries.

Coordination unit with specialist expertise

The coordination unit for child and adolescent health that is to be established is intended to provide specialist expertise in order to support, oversee and advance the implementation of the Child Health Strategy. It coordinates all activities within the Federal Ministry of Health that relate to this work and is to cooperate with institutions that are (co)responsible for the implementation of the measures (e.g. the Main Association of Austrian Social Insurance Institutions, federal provinces, etc.). Furthermore, it represents and coordinates the child’s specific point of view, including with respect to other key strategies and plans (e.g. health targets, Children’s Environment and Health Action Plan for Austria (in the context of the European CEHAPE initiative), National Action on Nutrition (NAP.e) National Action Plan on Physical Activity (NAP.b), etc.. It is to be assisted by an intersectoral Advisory Board.

Concrete responsibilities include:

- Coordination of activities relating to child and adolescent health within the Federal Ministry of Health and with Gesundheit Österreich GmbH
- Monitoring, further advancement and regular evaluation of the measures in the Child Health Strategy
- Intersectoral activities designed to raise awareness of Health in All Policies such as parliamentary enquiries and policy dialogues on intersectoral responsibility for child health
- Promotion of intersectoral cooperation in matters of child and adolescent health
- Representation of the child’s point of view in processes such as NAP.e, NAP.b, health targets, etc.
Intersectoral Advisory Board

An advisory board of this kind, which handles intersectoral child health issues, should comprise representatives from a number of central decision-making bodies and, if possible, should be overseen by scientific experts.

- Federal Ministry of Health (BMG)
- Federal Ministry of Education, Arts and Culture (BMUKK)
- Federal Ministry of Labour, Social Affairs and Consumer Protection (BMASK)
- Federal Ministry of Economy, Family and Youth (BMWFJ)
- Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)
- Sport department of the Federal Ministry of Defence and Sport (BMLVS)
- Federal provinces
- Social insurance institutions
- Austrian Federal Youth Representative Council
- Other key stakeholders

It is intended that the above board will cooperate with the coordination unit at the operational level.

Provision of data for regular appraisals

The coordination unit’s responsibility as regards “Monitoring and evaluation of the measures in the Child Health Strategy”, as formulated in Section 6.1, requires data and information. In conjunction with the Strategy, measures for improving the data situation have been proposed in numerous areas (particularly with respect to Goals 12 and 16), and these will simplify this task. A monitoring concept must be elaborated in order to ensure a structured approach to documenting implementation of the Strategy.

To date, the epidemiological situation in Austria has been primarily depicted by means of the cause of death statistics, cancer statistics and diagnosis and service performance documentation from the inpatient sector. Information on health behaviour is provided mainly by health surveys conducted among the population aged 15 and over. The most important, nationally consistent data source relating to child and adolescent health are the Health Behaviour of School-Aged Children (HBSC) surveys, which collect information on health determinants and the health situation every four years among a random sample of schoolchildren aged 11, 13 and 15 in the form of a questionnaire completed by the respondent. An Austria-wide standardised survey and evaluation of the results of routine examinations (in particular, Mother-and-Child Record check-ups) and of school and kindergarten check-ups would critically improve the data pool.

In conjunction with work to establish the consistent documentation of diagnosis and service performance in the outpatient sector, which has hitherto been universally lacking in Austria, the requirements ( formulated in the Child Health Strategy) relating to the care of children and adolescents must be satisfied. Furthermore, it is intended that documentation of the provision and take-up of non-medical care (e.g. in the psychosocial care sector) is to be improved, as this area plays a particularly important role with respect to children and adolescents.
Literatur


Bager, P; Wohlfahrt, J; Westergaard, T (2008): Caesarean delivery and risk of atopy and allergic disease: meta-analyses. In: Clinical and Experimental Allergy 38, 634-642


Beaino, Ghada; Khoshnood, Babak; Kaminski, Monique; Pierrat, Véronique; Marret, Stéphane; Matis, Jacqueline; Ledésert, Bernard; Thiriez, Gérard; Fresson, Jeanne; Rozé, Jean-Christophe; Zupan-Simunek, Véronique; Arnaud, Catherine; Burguet, Antoine; Larroque, Béatrice; Bréart, Gérard; Ancel, Pierre-Yves; for the Epipage Study Group (2010): Predictors of cerebral palsy in very preterm infants: the EPIPAGE prospective population-based cohort study. In: Developmental Medicine & Child Neurology 52/6, e119-e125


Bragg, Fiona; Cromwell, David A; Edozien, Leroy C; Gurol-Urganci, Ipek; Mahmood, Tahir A; Templeton, Allan; van der Meulen, Jan H (2010): Variation in rates of caesarean section among English NHS trusts after accounting for maternal and clinical risk: cross sectional study. In: BMJ 341, c5065


Chung, Judith; Phibbs, Ciaran; Boscardin, John; Kominski, Gerald; Ortega, Alexander; Needleman, Jack (2010): The Effect of Neonatal Intensive Care Level and Hospital Volume on Mortality of Very Low Birth Weight Infants. In: Medical Care 48/7, 635-644

DGGG Leitlinie Nr. 015/054. Absolute und relative Indikatoren zur Sectio caesarea und zur Frage der so genannten Sectio auf Wunsch. Deutsche Gesellschaft für Gynäkologie und Geburtshilfe


Hodnett, ED; Downe, S; Edwards, N; Wash, D (2005): Home – like versus conventional institutional settings for birth. In: Cochrane Database of Systematic Reviews

Hodnett, ED; Fredericks, S; Weston, J (2010): Support during pregnancy for women at increased risk of low birthweight babies. In: Cochrane Database of Systematic Reviews

Hodnett, ED; Gates, S; Hofmeyer, GJ; Sakala, C (2003): Continuous support during childbirth. In: Cochrane Database of Systematic Reviews


Johanson, R; Newburn, M; Macfarlane, A (2002): Has the medicalisation of childbirth gone too far? In: British Medical Journal 324/7342, 892-895


Khashu, M; Naravanant, M (2009): Perinatal outcomes associated with preterm birth at 33 to 36 weeks'
gestation: a population-based cohort study. In: Pediatrics 123/1, 109-113


Kiss, Herbert; Petricevic, Ljubomir; Husslein, Peter (2004): Prospective randomised controlled trial of an infection screening programme to reduce the rate of preterm delivery. In: British Medical Journal 329/7462, 371

Kiss, Herbert; Petricevic, Ljubomir; Martina, Simhofer; Husslein, Peter (2010): Reducing the rate of preterm birth through a simple antenatal screen-and-treat programme: a retrospective cohort study. In: European journal of obstetrics, gynecology, and reproductive biology 153/1, 38-42


Leitich, H; Bodner-Adler, B; Brunbauer, M; Kaider, A; Egarter, C; Husslein, P (2003): Bacterial vaginosis as a risk factor for preterm delivery: a meta-analysis. In: American journal of obstetrics and gynecology 189/1, 139-147


MacDorman, M F; Singh, G K (1998): Midwifery care, social and medical risk factors, and birth outcomes in the USA. In: Journal of Epidemiology and Community Health 52/5, 310-317


OEGRM (2010): Empfehlung zur maximalen Anzahl zu transferierender Embryonen. In: Journal für
Reproduktionsmedizin und Endokrinologie 7/2, 129-130


Pao-Feng Tsai, Mary M Jirovec: The relationships between depression and other outcomes of chronic illness caregiving. BMC 2005; 4:3.

Parks R; Rasch EK; Mansky PJ; Oakley F (2009): Differences in activities of daily living performance between long-term pediatric sarcoma survivors and a matched comparison group on standardized testing. Pediatr Blood Cancer. 53: 622-8.

Petersen C; Widera T; Kawski S; Kossow K; Glattecker M; Farin E; Follert P; Koch U (2006): Sicherung der Strukturqualität in der stationären medizinischen Rehabilitation von Kindern und Jugendlichen. Rehabilitation 2006; 45: 1-9


Püspök, R; Brandstetter, F; Menz, W (2011): Beträchtliche therapeutische Unterversorgung in Österreich. In: Pädiatrie und Pädiologie 46/1, 18-21


Sperl W; Nemeth C; Fülöp G; Koller I; Vavrik K; Bernert G; Kerbl R (2011): Rehabilitation für Kinder und Jugendliche in Österreich. In: Monatsschrift für Kinderheilkunde 2011: 7: 618-726


Suhrcke, Marc; de Paz Nieves, Carmen (2011): The impact of health and health behaviours on educational outcomes in high-income countries: a review of the evidence. Kopenhagen: WHO – Regional Office for Europe


Synnes, Anne R.; Anson, Shelagh; Arkesteijn, Astrid; Butt, Arsalan; Grunau, Ruth E.; Rogers, Marilyn; Whitfield, Michael F. (2010): School Entry Age Outcomes for Infants with Birth Weight ≤ 800 Grams. In: The Journal of pediatrics 157/6, 989-994.e1


Zwiauer, Karl; Burger, Petra; Hammer, Johann; Hauer, Almuth; Lehner, Andrea; Lehner, Petra; Mutz, Ingomar; Rust, Petra (2007): Österreichweite Feldstudie zur Erhebung der Prävalenz von Übergewicht bei 6- bis 14-jährigen Schülerinnen und Schülern. Wien: Österreichisches Grünes Kreuz