

Child Health Indicators for Europe

A priority for a caring society

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Background: Measurement of children's health is important for two reasons: first, because young people are citizens in their own right, yet largely unable to act as self-advocates, particularly at the population level; and second, because their health determines the health of the future population. Indicators based on measurements of child health are important for identifying progress, problems and priorities, changes over time, and newly emergent issues. The European Community Health Monitoring Programme (HMP) is a comprehensive programme to develop and implement a set of national-level indicators. The Child Health Indicators of Life and Development (CHILD) project is the only population group-specific project, seeking to determine a holistic set of measures. **Methods:** The project endeavoured to address all aspects of child health and its determinants, balancing positive and negative aspects. It undertook a structured search of published evidence to seek to identify, and validate, indicators of health and illness, health determinants and challenges to health, quality of healthcare support and health-promoting national policies. A systematic approach was used in identifying valid indicators, and in assembling a balanced composite list. All ages from infancy to adolescence were covered. **Results:** The project's final report identifies 38 core desirable national indicators, citing purpose and evidence for each. Of equal importance, it also identifies 17 key child health topics on which further research work is needed in order to identify and validate indicators appropriate across different national settings.

Keywords: child health, health determinants, health indicators, health measurement

The Child Health Indicators of Life and Development (CHILD) project was a third-wave project within the European Community Health Monitoring Programme (HMP). Its formal duration was two years from October 2000 to September 2002, but for practical reasons the key work was undertaken in eighteen months commencing in April 2001. The remit was to identify and recommend indicators of the health of children between the ages of one week and 15 years. Indicators for the health of children aged under one week were the responsibility of the parallel project on maternal and perinatal health (PERISTAT); the upper age limit was a reflection of the traditional quinquennial age bands for population statistics.

The European Community Health Monitoring Programme at the time of the CHILD Project was restricted to member states of the European Community and the European Economic Area (EEA). The project actually

comprised representatives from 17 countries – all 15 Member States together with Iceland and Norway from the EEA. Each participating nation was represented by a locally nominated expert; in turn many of these involved other local experts or national groups as a source of further evidence. The Project reported in September 2002.¹

The nature and size of the challenge

The CHILD Project was unique among the HMP projects in that its responsibility was to a population cohort – namely children. All the other projects were concerned either with data sources or indicator methodology (for instance projects relating to mortality data, hospital statistics, or the potential from primary care sentinel practices), or were related to specific diseases or health determinants (for instance cancer and nutrition). Indeed, when the CHILD project was first established there was some questioning from peer projects as to whether there was a need for a specific child health activity, as they felt that the needs of this group would be covered by the core remit of the individual projects. On the other hand and in somewhat sharp contrast, experts within the child health field welcomed the recognition of the significant differences within child health. Health determinants, disease patterns, preventive and therapeutic health services and data sources are all different for children compared to adults.

The project members were aware of the significance of the task. Approaching a quarter of the population of Europe consists of children – some 70 million young

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people. Not only are they people and citizens in their own right, but the future well-being of Europe depends on their health and development.

The advocacy function

Also important is the fact that children are not their own advocates, and are dependent upon adults and adult-focused systems to represent their interests. While most children are appreciated and well cared for, at both the individual and the population group levels some are poorly cared for or neglected: a minority are harmed or abused, and others suffer unnecessary compromises to their health. This means that understanding of health determinants and health indicators for children, and relevant data sources, needs a strong insight into interpretation of the available data, and often, obtaining robust indirect measures of health. Many data sources, such as census and survey data, are analysed by adult or household viewpoints, for example adults smoking rather than children exposed to domestic tobacco smoke; households overcrowded or lacking basic amenities rather than children (by age-group) living in such conditions. In this setting, robust and relevant child-based indicators have the potential for a relatively bigger influence and impact on children's health and well-being than do adult health indicators, where other means of representation on the health issues are available. The project therefore determined to be consistently *child-focused* and *child centric*.

The strategic opportunity

In the face of this debate between on the one hand questioning whether child health indicators were intrinsically different from generic ones, and on the other hand the belief that a very different understanding of issues and their indicators was necessary, leaders of the project saw it as a major strategic opportunity to promote wider understanding of the special information requirements for measuring child health. This was underscored by the belief that there was a second area of debate, within the paediatric and child health professional community rather than in the context of indicators projects, namely as to whether child health and its services should be reviewed in terms of measures at the individual level or at the population level, with the feeling that the latter was inadequately understood or valued.

Thus the project was seen as strategic both within the health monitoring programme, but also within the child health community. It was an opportunity to be addressed with particular commitment. Further, it was realized that if there was to be a subsequent commitment to implementing the indicators which were to be recommended, the support of the paediatric and child health community would be important in addition to that of the health monitoring programme and statisticians. From the outset, therefore, the project resolved that:

The CHILD work should be in the centre of Child Health, not in the periphery of health monitoring.

Key influences

The CHILD project therefore faced a great challenge – ascertaining the issues affecting the health, development, and preventive and therapeutic services for a most important section of the population of Europe, but with the further underscoring that this was strategic within the wider child health community, and also that it was an advocate project in a stronger sense than those relating to adult health issues. Fortunately, several sources of strategic guidance were identified, and were utilized by the project from its initial stages onwards.

The first was the United Nations Convention on the Rights of the Child² – this sets out a series of principles, including the right to health, endorsed by all European nations and most others globally. Rigby had outlined the importance of information about child health issues being available in appropriate forms at all levels including the political,³ while the same year Köhler had defined the responsibilities and principles of the discipline of child public health.⁴ Mechtler and Rigby had published on a pilot project to compare child health data sets between two European countries,⁵ while Tamburlini had developed a national child health indicator set.⁶

Within European health monitoring, an HMP project entitled the European Community Health Indicators (ECHI) project had produced an overall taxonomy and top-level first trawl of a suite of possible health indicators.⁷ This project had suggested that indicators fell within four categories, all of which had their important role, namely:

- Demography and socio-economic situation,
- Health status,
- Determinants of health,
- Health systems.

THE CHILD PROJECT METHOD

Faced with the task ahead, the CHILD project determined to tackle this in a scientific and evidence-based way. The first meeting therefore mapped out a broad picture of all the issues in the health of children, clustered these into broad themes, and established leaders who would review the evidence within these themes in order to identify a first informal long list of issues which had the potential to be measured.

Issues in the health of children

The list of topics identified was:

- Demography,
- Socio-economic status and inequity,
- Social cohesion/capital,
- Migrants,
- Marginalized children,
- Family cohesion,
- Mental health,
- Quality of life,
- Well-being,
- Lifestyles,
- Health promoting policies,
- Nutrition and physical growth,

- Development (including intellectual and social),
- Mortality, morbidity, injuries,
- Environment,
- Access and utilization of services.

Systematic evidence review

The process within each of these topics was to:

- Review the literature as to the principal child health issues within this topic,
- Identify those aspects that were capable of objective measurement,
- Consider whether these measures were available from data sources that could be compiled at the population level,
- Assess whether these were issues equally important, and equally measurable, across the whole of Europe bearing in mind the different cultures, health systems, and lifestyle factors.

Model health indicator characteristics

At this stage the project also considered the essential intrinsic characteristics of indicators as objective statistical measures. It determined a set of important characteristics which are shown in *table 1*.

Systematic prioritisation and selection

Having set this framework, members of the project proceeded with the process agreed. In due course this led to the full project team receiving reports in turn from the leaders of each of the topics defined earlier. A five-stage process led from receipt of the topic reports to the publication of the final list of recommended indicators described below. These five stages were:

1 *Long List* – this was created from the potential measures identified in the topic studies.

2 *Medium List* – the project met in plenary and split into working groups to score the candidate items against a list

of key characteristics, eliminating all those which failed to satisfy essential requirements.

3 *Short List* – those potential indicators which survived the initial filtering were then referred back to the working groups, who were required to produce definitions, supporting bibliography, and potential data sources. If these three could not be produced the potential indicator was eliminated as impractical at this stage.

4 *Consultation* – consultation was undertaken both with an external Expert Review Group, and also in the final stages with national meetings in a number of countries. This process influenced the final list both by discouraging inclusion of least strong items, but also by identifying gaps in the range of indicators, and suggesting some additional measurable items.

5 *Finalisation* – the full group met to finalize the list and presentation of evidence.

The characteristics which were used as filtering criteria are shown in *table 2*.

THE CHILD IN CONTEXT

In looking at the wealth of topics which arguably could be included in a comprehensive set of child health monitoring indicators, the project looked at the totality of determinants of child health, and the actions and services which sought to have positive influence. These were seen as many and varied, including the traditional biophysical, social and economic determinants, together with the physical environment and health and education services.

However, it was also recognized that there were other important determinants, not least the cultural and legal frameworks. Having determined its own approach, the project then compared and validated this by reference to earlier work from Sweden,⁸ and was able to demonstrate diagrammatically a range of influences and forces which exists. This is shown in *figure 1*.

THE AGES OF CHILDHOOD

As indicated earlier, the project had been given the remit of looking at the monitoring of health of children aged from one week to 15 years. Regarding the lower limit there was no real problem, and there was constructive liaison with the PERISTAT project. However, the upper age limit was more problematic. The United Nations Declaration on the Rights of the Child sees childhood as extending up to the 18th birthday, and this matches with

Table 1 Target intrinsic characteristics of indicators applied in the CHILD Project

Valid in a number of respects
Face validity: pertains to the indicator's ability to measure what it says it measures
Content validity: means that an indicator takes into account the qualities that its definition implies
Construct validity: means that the indicator demonstrates an expected empirical relationship with other related indicators
Consistent: having reliability in measurement, so that variation in value is true variation not random error
Sensitive: in order to register appropriate change
Feasible: reliable source data must be available
Defined: unambiguous in its data construct
Topic definition: e.g. immunization status is different from immunological status
Measure definition: e.g. weight – naked or in indoor clothes?
Measurement definition: e.g. measure/tests/methods used, e.g. for height, colour-blindness
Data Capture definition: e.g. automated capture, routine manual recording, visual or pathological diagnosis, exception reporting

Table 2 Filtering criteria for potential indicators

1	<i>Evidence-based</i> , underpinned by research
2	<i>Significant Burden to Society</i>
3	<i>Significant Burden to Family</i>
4	<i>Significant Burden to Individual</i>
5	<i>Representative of Significant Population Groups</i>
6	<i>Regularity and Repeatability</i> , to enable trend analysis
7	<i>Data Availability</i>
8	<i>Topic Amenable to Effective Action</i>
9	<i>Understandable</i> to broad audience

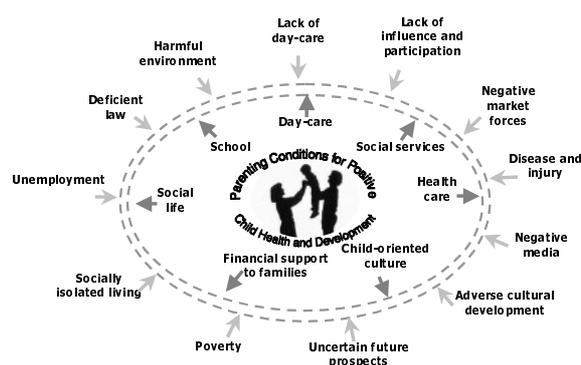


Figure 1 Forces and influences in child health
Adapted by Gunnlaugsson G and Rigby M from Skolhälsovården 1998. Underlag för egen kontroll och tillsyn. Stockholm: Socialstyrelsen, 1998.⁸

the legal definition of adulthood in many European countries. To exclude children aged 15–17 years inclusive from health monitoring is to disenfranchise that group, when its members have particular health needs, and age-group-specific positive and negative determinants of health, which would be overlooked. For most of the indicators the project has therefore recommended using three quinquennial age bands, plus a fourth age group of 15–17 years, or if this latter is not feasible then a fifth five-year group of 15–19 years inclusive. Moreover, the project recognized that childhood falls into four broad stages – infancy, younger childhood, older childhood, and adolescence. Each of these stages of childhood has its own health determinants and health needs, and therefore indicators of health in childhood need to be broken down into smaller age bands, of which the traditional five-year age bandings are the nearest available approximation.

SOCIO-ECONOMIC GROUPING

The project recognized the importance of socio-economic group as a determinant of child health, both in terms of health itself and in terms of access to services. The specific groupings to be used need further discussion, and were not considered in detail within the CHILD project, other than that some salient points were fed back to the parent Health Monitoring Programme concerning the importance of finding suitable means of measuring the socio-economic group of children in all circumstances, particularly those of single mothers or parents who have not entered the employment system.

GENDER DIFFERENTIATION

It is known that there is a gender bias in many aspects of child health. However, the project was strongly influenced by further examples of gender differences, and also by evidence received from ongoing work that such biases occurred in unexpected areas such as immunization and

hospital access. The point was made that because few statistical series contain gender, it is likely that gender bias occurs in many other areas but is not known simply because the data are not available for analysis. Therefore in many of our recommended monitoring areas we include the view that gender should be analysed as well, so as to identify, possibly for the first time, whether or not such bias exists in regard to other aspects.

BURDEN OF ILLNESS

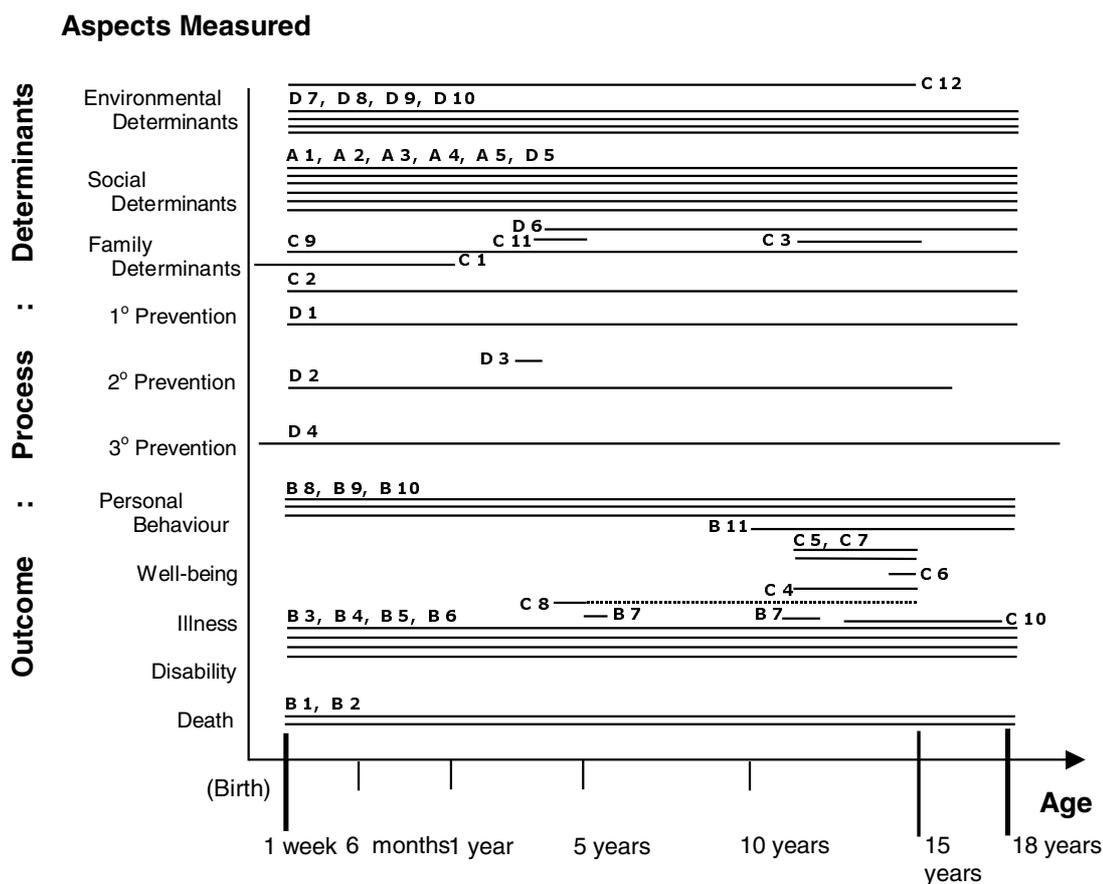
We were particularly aware within the CHILD project that the burden of illness in children is often under-identified. The general issues of burden of illness are understood, and are capable of measurement by techniques such as quality adjusted life years (QALYs) and disability adjusted life years (DALYs). However, there are additional consequences of a burden of illness in childhood where a period of hospitalization or other incapacitation may result in lost schooling, and lost opportunities for play. These losses are in turn likely to lead to reduced educational attainment and reduced socialization, in turn resulting in lower economic capacity throughout adult life, and in compromised social skills and thus quality of life.

As the CHILD project was a policy analyses project in line with other HMP projects, rather than a fundamental research project, it was not able to analyse this further or to suggest comparative weightings of different health problems. However, it has identified the aspects of burden of illness in childhood believed to deserve further and deeper work. These are shown below:

- Burden of discomfort and pain on the child.
- Burden of anxiety, distress, and possibly loss of earnings for the parent(s) looking after the sick child.
- Burden on society funding the health services, and on occasion special education and social services support.
- Burden in more severe cases on the social welfare system, potentially for a lifetime.
- Burden caused by medium or long term illness causing loss of normal play and socialisation, thus impeding normal development with potential life long effects.
- Burden caused by lost education which may jeopardize career and thus income potential for a lifetime.
- Burden on future generations, as the child with an extended ill health burden becomes a parent with restrictions on their parenting skills, and becomes an older family member dependent on their successor generation.

A CHILD DIMENSION TO THE ECHI FRAMEWORK

As the CHILD project came towards the end of its task, it also had chance to review critically the framework created by the ground breaking ECHI project.⁷ Though the four components were sound, they did appear to give an adult viewpoint, while at the same time excluding risk, wellness and public policy as important dimensions. The CHILD project has therefore fitted its recommendations into a slightly modified ECHI framework, using the



ABBREVIATED KEY TO INDICATORS

A. Demographic & Socio-Economic

- A 1 Socio-economic Circumstances
- A 2 Children in Poverty
- A 3 Parental Educational Attainment
- A 4 Child in Single Parent Households
- A 5 Asylum Seekers

B. Child Health Status, Well-being

Child Mortality

- B 1 Child Mortality Rates
- B 2 Selected Cause-specific Mortality

Child Morbidity

- B 3 Cancer
- B 4 Diabetes
- B 5 Asthma
- B 6 Infectious Diseases
- B 7 Dental Morbidity

Injuries to Children

- B 8 Burns Necessitating Admission
- B 9 Poisoning Necessitating Admission
- B 10 Fracture of Long-bones

Mental Health of Children

- B 11 Attempted Suicide

C. Health Determinants, Risk, and Protective Factors

Parental Determinants

- C 1 Breastfeeding
- C 2 Household Environmental Tobacco
- C 3 Parental Support

Child Lifestyle Determinants

- C 4 Physical Activity
- C 5 Tobacco Smoking
- C 6 Alcohol Abuse
- C 7 Substance Misuse

Other Factors

- C 8 Overweight and Obesity
- C 9 Children in Care
- C 10 Early School Leavers
- C 11 Educational Enrolment
- C 12 Air Pollution Exposure

D. Child Health Systems & Policy

Health Systems Policy

- D 1 Marginalised Children's Health Care
- D 2 Parental Inpatient Accompaniment

Health System Quality

- D 3 Immunisation Coverage
- D 4 Leukaemia 5-year Survival

Social Policy Indicators

- D 5 Physical Punishment
- D 6 Anti-bullying policies in schools

Physical Protection Policy

- D 7 Child Transportation Safety
- D 8 Exposure to Lead
- D 9 Exposure to Hazardous Noise
- D 10 Environmental Tobacco Smoke

Figure 2 Spread of indicators

following four categories (the CHILD-specific variations being *highlighted*):

- A Demographic and socio-economic (*Upstream Health Determinants*),
- B Health status and *Well-being*,
- C Determinants of health, *Risk and protective factors*,
- D Health systems and *Policy*.

The project also felt constrained within its task by the limitations of the available evidence. We found some areas where identified measures were not available, and others where there was a significant health issue but the comparability of indicators across the nations of Europe had not been validated. Thus the indicator set recommendation from the CHILD project is known to have deficiencies in the form of gaps, and therefore to underscore the importance of filling these the project report

gives a simple framing of the health dimension and the related research on indicator validation which needs to be undertaken before recommendations can be made in these specific areas.

The final recommended indicators from the project are intended to give a balanced coverage, while at the same time the gaps caused by lack of current evidence are defined. The spread of indicators of the CHILD project is shown in *figure 2*, the recommended research areas in *table 3*, and the more detailed list of indicators in *table 4*.

CONCLUSION

The authors and the members of the project recognize that any attempt to produce a magic matrix to measure child health and health services simplistically is doomed to failure. A philosophy behind the project in many cases

Table 3 Necessary further research on child health indicators: topics for further research

Child abuse	This a crucial but difficult field to measure at the individual level, as well as at the population level
Childhood behaviour disorders	Childhood behaviour disorders create heavy burdens, but are not easy to measure at the population level
Learning disorders/intellectual disability	An indicator requires further research on assessment and reporting methods
Educational development	Intellectual development is important and a suitable indicator of educational outcome at 15 years is needed
Perceived well-being, quality of life and positive mental health	It is important to define an indicator including feelings of health, well-being and quality of life
Children with permanent or severe disability	These are an important and under-represented group. However, there are currently difficulties in defining handicap, while international initiatives in this respect are as yet unproven in operational practice in child health
Family cohesion and social cohesion	These concepts are recognized in Europe, USA, and Australia as important health determinants, but are difficult to measure in a comparable way
Nutritional habits	Indicators are needed for younger and older children's nutrition and food consumption
Health care access	It is important that all children have free and unrestricted access to the full range of health care
Inpatient service quality	Admissions of children to hospital should be in paediatric departments with appropriate facilities. Further work is needed to produce a definition which is clear, feasible, and applicable across Europe
Health service access for socially restricted children	Two groups of already disadvantaged children have further practical restrictions placed on their access to the full range of therapeutic, preventive, and advisory health services – young offenders in institutions, and children in the care or supervision of social services or child protection agencies
Medication	There is a need for indicator(s) on levels and types of medication for children
Play and leisure	The existence of facilities that are safe and available to children is important for their physical and social development, but further research needs to be undertaken to enable the definition of a comparable indicator
Assessment of children with special needs	The right to statutory assessment procedures to assess and meet the requirements of children with physical, social, or educational special needs further study as to suitable definitions and measures
Integration of children with special needs	Measurement of the integration of children with special educational needs into normal schools
Healthy parenting	An indicator on the percentage of children under 1 year of age whose parents have access to a programme of education, psychological, and social support in parenting during the first year of life
Mental health education	The provision of a nationally endorsed or recognised curriculum or programme

Table 4 The CHILD Project recommended indicators summarized

Category	Recommended indicators (summarized definitions, and excluding gender, age-group and socio-economic groups recommended in full report)
Demographic and socio-economic determinants of child health	<ul style="list-style-type: none"> Percentage of children living in households in each of six socio-economic categories Percentage of children living in households with a household income below the national 60% median Percentage of children whose current 'mother' had attained elementary/lower secondary/upper secondary/tertiary education Percentage of children who live in family household units with only one parent or primary care-giver resident Rate per 1,000 of children seeking asylum, alone or as part of a family
Child health status and well-being	
Child mortality	<ul style="list-style-type: none"> a) Total infant mortality rate (IMR) between birth and exactly one year of age b) Total mortality rate between birth and exactly five years of age (U5MR) c) Total under-20 years mortality rate per 100,000 Cause-specific mortality rates per 100,000 population for: <ul style="list-style-type: none"> a) Infectious diseases b) Congenital malformations c) Malignant neoplasms (cancers) d) Unintentional injuries <ul style="list-style-type: none"> Burns Poisoning Transport accidents Drowning e) Suicide f) Assault and homicide g) Perinatal causes
Child morbidity	<ul style="list-style-type: none"> Annual incidence of childhood cancer per 100,000 population, for <ul style="list-style-type: none"> a) Leukaemia b) Malignant brain/CNS tumours c) Other malignant tumours Annual incidence of Type 1 insulin-dependent diabetes per 100,000 population Prevalence of asthma Annual incidence per 100,000 population of <ul style="list-style-type: none"> a) Measles b) Bacterial meningitis c) Tuberculosis Mean dmft index for 5-year-old children and mean DMFT index for 12 year old children
Injuries to children	<ul style="list-style-type: none"> Annual rate of overnight hospital inpatient admissions of children suffering burns Annual rate of overnight hospital inpatient admissions of children suffering from poisoning Annual incidence per 100,000 population of fracture of long bones
Mental health of children	<ul style="list-style-type: none"> Annual incidence of attempted suicide, defined by inpatient hospital stays with a discharge diagnosis of attempted suicide
Determinants of child health, risk and protective factors	
Parental determinants	<ul style="list-style-type: none"> a) Percentage of newborn children exclusively breastfed b) Percentage of all 6 month old children exclusively breastfed at 6 months c) Percentage of all 12 month old children receiving breastfeeding at 12 months Percentage of children aged 0-4 living in households where any member of the household smokes Percentage of children who report that they find it easy or very easy to talk with their parents when something is really bothering them

To be continued

has been the identification of tracer indicators – these may be related to tracer health conditions which will be indicative of other health aspects too, or they may be tracer services.

We were very aware of the wider readership which published indicators should have when our recommendations are implemented on an operational basis. It is very important that the readership of published indicator sets should include persons such as national policymakers and

politicians, but at the same time there is potentially the danger of their drawing simplistic conclusions by looking at only the condition measured, rather than the wider health aspect which this represents. We have therefore as far as possible, given a more generic title for the indicator to show the health aspect which has been represented, as well as the detailed formal statistical definition to ensure that valid and comparable data are compiled. For each indicator the published final report contains a detailed

Table 4 continued The CHILD Project recommended indicators summarized

Category	Recommended indicators (summarized definitions, and excluding gender, age-group and socio-economic groups recommended in full report)
Child lifestyle determinants	<p>Percentage of children reporting that that they undertake vigorous activity outside of school hours for at least two hours a week</p> <p>Percentage of children reporting that they smoke every week</p> <p>Percentage of children aged 15 reporting that they have been drunk from alcohol consumption on two or more occasions</p> <p>Percentage of 15-year-old school children who report that they have:</p> <ol style="list-style-type: none"> used cannabis more than twice during the last 30 days ever used heroin and ever used ecstasy
Other health determinant factors	<p>Percentage of children at school entry who are overweight or obese as measured by the age- and sex-specific international reference standards for Body Mass Index; optionally also at 10 and 15 years</p> <p>Percentage of children who are under the care or formal supervision of statutory social welfare or social services agencies</p> <p>Percentage of children who leave school (voluntarily or by exclusion) before the statutory school leaving age</p> <p>Percentage of children aged 3 and under 5 years enrolled in a Level 0 (pre-primary) education or kindergarten programme</p> <p>Percentage of children aged 0–14 living in localities with an annual mean concentration of >40 ppm of PM10 in the air</p>
Child health systems and policy	
Health systems policy	<p>Is it national policy that children in all ages in the following groups have access to both immunization and to non-emergency diagnostic investigations comparable to that offered the general resident child population?</p> <ol style="list-style-type: none"> Asylum seekers Children of illegal immigrants/illegal residents Homeless children Culturally itinerant children (gypsies, Romany, etc.) <p>Percentage of inpatient bed days of children aged under 16 occurring in hospitals where accompanying by 'parents' day and night is offered</p>
Health system quality	<p>Immunization rates for childhood immunisation, expressed as children aged 24–35 months inclusive having completed primary courses of immunization as a percentage of all children in that age-group, separately for the following antigens:</p> <p>Diphtheria, pertussis, tetanus, poliomyelitis, haemophilus influenza type b, measles, mumps, rubella, hepatitis B, meningococcus C</p> <p>Five-year survival rate for acute lymphatic leukaemia, in age-groups at diagnosis 0–4; 5–9; 10–14; 15–19</p>
Social policy indicators	<p>Percentage of children in the country protected by law against physical punishment</p> <ol style="list-style-type: none"> in schools and other places where children are looked after in the home or by parents and family members <p>Percentage of children attending schools with a written anti-bullying policy in operation</p>
Physical protection policies	<p>Existence and actual enforcement of legislation and regulations establishing mandatory requirements for safe mobility and transport for children</p> <p>Existence of legislation and regulations that limit the use of lead in building and decorating materials and establish bio-monitoring of babies and children at high risk</p> <p>Existence of policies aimed at assessing and reducing the exposure of babies and young children to potentially harmful noise in ICU units, day-care centres, schools and kindergartens</p> <p>Existence and enforcement of laws and regulations aimed at protecting children from exposure to environmental tobacco smoke in public places</p>

template, giving the rationale for the indicator, its technical definition, the likely data sources, and the published evidence on which the recommendation is based.

The project team sought to be realistically progressive, believing that the task is so important that some adjustments to feeder data sources may be necessary to achieve the full indicator set, while being sufficiently rooted in current information flows within member states that the majority of the indicators should be capable of compilation at least in a high level form within a comparatively short time. However, even within the first few months following completion of the report, the first important objective appears to have been achieved in many countries, in that new national discussions have started concerning patterns of data collection and central information supply. This stimulated local discussion will be one of the most important additional benefits of the CHILD project, as it is leading to wider discussion on the measurement of child health and the adjustment of policies and services.

The CHILD project was substantially funded by the European Commission Health and Consumer Protection Directorate-General, under the Health Monitoring Programme.

The work was undertaken by expert representatives from 17 countries, as listed in the main report.¹ Results were presented at the European Public Health Association meeting, Dresden, 2002.

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