ANNEX 5

TO THE ECHI-2 REPORT OF JUNE 20, 2005

THE ECHI COMPREHENSIVE INDICATOR LIST (LONG LIST)
VERSION OF JULY 7, 2005

This is version 7 July, 2005, of the ECHI comprehensive indicator list, hereafter called 'long list'. It is the last version issued within the frame of the ECHI-2 project. Further developments will be taken up under the ECHIM/WP7 project.

This 7 July version is the follow-up of the 16 February 2004 version. While the latter was an MS-Word file, the present version is a print from the ICHI web-application (see main report, paragraph 9 and Annex 9). This application will be available shortly on the internet (www.healthindicators.org). Further developments will be imported and appear in this application.

By content, the list has the following characteristics:
- Arrangement of the indicators: All indicators are arranged in the ECHI framework, i.e. in the four classes: (1) Demography/socio-economic situation, (2) Health status, (3) Determinants of health, (4) Health systems, and their subdivisions. The agreed division of the class Health systems into 'health services' and 'health promotion' has not yet been implemented in the ICHI application.
- Origin of the indicators: In the list, quite a few indicators are derived from WHO-Euro (HFA database), from OECD (OECD health data) or Eurostat (Variable in New Cronos). Many indicators are included as recommendations of projects run under the Health Monitoring Programme (HMP).
- Justification for selection: In most of the headings to the sections in the list, the rationale is given of why we have indicators in the particular section, what the section is intended to cover, and what kind of selection criterion was used, within the section. For specific indicators, the justifications for selection are mostly given in the project reports which recommended the indicator.
- Status of indicators: Some 'indicators' are not really indicators but rather topics for which information is needed but for which a proper definition has not yet been proposed. In some cases, recommendations from HMP projects were presented group-wise, in order to keep the list within reasonable length.
- Items given for each indicator: For each indicator, the list presents:
  - The name of the indicator or topic.
  - If available, the definition(s), indications on stratification by gender, age, SES or region, and further comments, with reference to the origin of the indicator.
  - If available, the type of data source involved. Sometimes this refers to existing data sources, but quite often also, it refers to a preferred means of data collection (e.g. surveys) which has not been realised.
  - If available, the international database, HMP project or other source from which the indicator was derived.
- User windows: the allocation of an indicator to one or more user windows is shown in the first column (as UW-x). As explained in the main text of the report, user windows are formulated as subsets of indicators, selected from a specific perspective. The numbers of the user windows shown correspond with the list given in *Annex 8* to the report. This list is reproduced below in an abbreviated form. In the ICHI web application, these user windows can be

selectively presented. It should be noted that the 'User windows devised by ECHI' are tentative examples only.

- The user window UW-0 (zero) is identical to the ECHI shortlist, which is a subset of this long list, like all other user windows defined.

Clearly, the status of this ECHI long list is that of a *structured inventory* of indicators proposed by many. At the lower level of detail, the list may seem unbalanced sometimes, resulting from the various ways in which the contributing projects have worked towards proposing indicators. From this long list, user windows can be defined for further practical work in data collection and harmonisation. At the same time, the list will be developed and improved continuously.

User windows referred to in the comprehensive indicator list: based on recommendations of HMP projects and Working Parties:

- UW-1, Mental health: recommendations of the Mental Health project, recently the Working Party on Mental Health.
- UW-2, Cancer: Eurochip and CAMON projects.
- UW-3: Diabetes: EUDIP project.
- UW-4: Cardiovascular disease: Eurociss project.
- UW-5: Lung disease: IMCA project.
- UW-6: Musculoskeletal disorders: MSD project.
- UW-7: Oral health: Oral health indicators project.
- UW-8: Injuries: Working party on accidents/injuries.
- UW-9: Perinatal health: Peristat project.
- UW-10: Child health: CHILD project.
- UW-11: Reproductive health: Reprostat project.
- UW-12: Health in intellectually disabled: POMONA project.
- UW-13: Lifestyle indicators connected to cardiovascular disease, diabetes and others: EHRM project.
- UW-14: Nutrition: 3 projects: EFCOSUM, Dafne and Public Health Nutrition; the latter includes the former two (also physical activity).
- UW-15: Environment and health: ECOEHIS project.
- UW-16: Working environment: Workhealth project.
- UW-17: Health promotion in various settings: EUHPID project.

User windows referred to in the comprehensive indicator list: based on proposals by ECHI:

- UW-18: Health of the elderly.
- UW-21: Socio-economic health inequalities.
- UW-22: Health system performance.

Below is the index of the chapters of the indicator list, with the subdivisions:

1 Demography and socio-economic situation

These indicators give a general picture of the situation in a country or region, with respect to health-relevant issues.

1.1 Population

The demographic data provide the denominator for calculation of many other indicators, including the stratification by gender, age or region, and the calculation of standardised rates (i.e. corrected for differences in population structures between countries).

1.1.1 Population status

Population by gender/age; UW-0, UW-5, UW-14, UW-18.

Numbers, percent, minimally presented by age bands 0-14, 15-44, 45-64, 65-84, 85+ (ICD-10 minimal recommendation, with the 1-year limit deleted and the 85+ limit added); optionally by age bands 0, 1-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+ (ICD-10 optional recommendation with 85+ added, being the Eurostat grouping for mortality data in Key Data on Health 2002). Also age dependency ratio: 0-14 plus 65+ divided by 15-64. Total/male/female. PhNut project: Median age of population; % population under 15; % population 65 and over.

Basic demography.

Eurostat; WHO; OECD. These age classes to be used when stratifying other variables by age. Also in Social Protection Committee indicators. PhNut project.

Population by subnational region.

Eurostat: by NUTS levels. Isare project gives health-policy-related regions.

Eurostat. Isare project.

Population by urbanisation level.

Eurostat: Urban population as % of total.

Population statistics.

Eurostat; WHO.

Total population

Total population number.

Population statistics.

1.1.2 Population dynamics

Annual population change.

Number, percent.

Population statistics.

Eurostat.

Birth rate, crude; UW-0.

No of live births per 1000 population.

population statistics.

Eurostat; WHO; OECD.

Also in Social Protection Committee indicators.

Death rates.

Total deaths;

Crude death rate: deaths per 100.000 population. Workhealth project inventory: 18-65 years old, by occupation, branch (definition?).

Population statistics.

Eurostat. Workhealth project.

Distribution of parity; UW-9.

Distribution of the number of previous live/still births of women delivering a live or stillbirth.

Civil/medical birth registries; perinatal health surveys.

Peristat project: note varied registration of previous stillbirths or multiples.

Fertility rate; UW-0, UW-11.

Mean number of children per woman during childbearing age; i.e., the number of births a woman would have if she experienced the current age-specific fertility rates throughout her childbearing life (definition Eurostat, WHO).

Population statistics. Also Eurostat Sustainable Development indicator.

Eurostat; WHO; OECD. Reprostat project.

Induced abortions; UW-11.

Number and rates of induced abortions per 1000 live births; also: induced abortion per 1000 women 15-49 of age.

WHO-HFA: number of induced abortions per 1000 live births; total, <20, >35 age mother.

Reprostat project.

Maternal age at 1st birth; UW-11.

Mean and median age of women at first delivery.

Birth registers, vital statistics, Council of Europe.

Reprostat project.

Migration.

Net migration; immigration and emigration separately.

Population statistics.

Eurostat.

Mother's age distribution (teenage pregnancies, aged mothers); UW-0, UW-9, UW-11.

No. births per 1000 women 15-19; per 1000 women 20-34; per 1000 women 35-49. Option: specify under 16 and under 18. Peristat: distribution of age in years at delivery.

Reprostat: % live births in women under 20;

WHO: % live births in women over 35.

Birth registers, census, perinatal health surveys.

Eurostat; WHO. Reprostat, Peristat projects.

Population projections; UW-0.

Population up to 2050, by gender, age groups.

Population statistics and modelling.

Eurostat.

1.2 Socio-economic factors

The indicators included here represent population background factors that have been selected since they are important 'distal' determinants of health; they can be used for stratifying other indicators according to socio-economic status (education, occupational class, income); more extended data and indicators in this area are available by Eurostat.

Note on stratification by SES level: According to SES project, use rate ratios and absolute rate differences; preferably by extreme groups for education and income (occupational class). WHO/HQ: inequality to measured as such, not with reference to any gradient. ECHI subgroup: no need for separate inequality indicator; tackle the point by proper stratification of other issues.

1.2.1   Education

Justification for selection: education level is one of the most clear-cut elements of SES as a determinant of health, and well measurable.

% of 18-24-y old, not in education and with low qualifications.

Eurostat key indicator.

Eurostat.

Early school leavers; UW-10, UW-21.

% children leaving school before statutory age. CHILD project: associated with mental and social problems. By gender, age group. Laeken indicator: share of persons aged 18-24 with only secondary education (highest level ISCED 0, 1 or 2), and with no education past four weeks.

Education statistics. Eurostat Laeken indicator (Labour Force Survey).

CHILD project.

Education enrolment.

No, %, 4 ISCED classes.

Education environment of children.

% children with 'current mother' in each of the 4 ISCED classes; by gender, 5y age groups < 17.

Population census; household survey.

Child project.

Education in working population; UW-16, UW-17.

% of working age population participating in education and training.

Workhealth project.

Education of mothers; UW-9, UW-10.

% of women delivering babies in each of the 4 ISCED classes. Also: distribution of education levels of women delivering, as highest completed level or number of cmpleted years of education.

Birth registers, perinatal surveys.

Peristat project.

Literacy rate.

Percent population 15+.

WHO.

Population by education; UW-0, UW-5, UW-14, UW-18.

No, % in 4 classes: elementary, lower secondary, upper secondary, tertiary (ISCED); by gender, age, region.

Registry; survey.

SES project; classes to be used when stratifying other data to SES. Eurostat; WHO; OECD. PHNut project.

Pre-primary education age 3-5; UW-10, UW-21.

% children aged 3 and under 5 in pre-primary education. CHILD project: association woth later achievements. By gender, SES.

Survey, register.

CHILD project.

1.2.2 Employment

Justification for selection: employment type is one of the important elements of SES as a determinant of health, and well measurable.

Children by household occupational class; UW-10.

In children: % of children living in households of each of 6 ISCO classes (highest of father/mother), by gender, 5y age groups <17.

Population census; household/labour force survey.

Child project.

Employment of intellectually disabled; UW-12.

Pomona project: Employment and daily occupation of intellectually disabled.

to be worked out.

Pomona project.

Population by employment type; UW-5, UW-16.

ISCO classes 2-digit; useful in health context? Workhealth project inventory: consider contract types, employement type, second jobs, part-time work, supervision.

Eurostat. Workhealth project.

Population by occupational class; UW-0.

No, % in current or last occupation group. SES project mentions 6 groups: upper non-manual, lower non-manual, skilled manual, unskilled manual, self employed, farmer. A new 'European Socio-Economic Classification (ESEC)' scheme is in preparation (Eurostat project). Also to be used for stratifying other data by SES.

Registry; survey.

SES project; classes to be used when stratifying other data to SES;

PHnut project. Eurostat.

Total employment; UW-16.

Employment rate, 15-64, by gender, age groups, region. Workhealth project inventory: additional variables.

Labour Force Survey.

Eurostat. Workhealth project.

Total labour force.

Total unemployment; UW-0, UW-14, UW-16.

Eurostat: proportion unemployed in active population; longterm: >12 mnts (for 15-24: > 6 mnts), by gender, age groups, region. Workhealth project inventory: also by disabilities, in minority groups.

Eurostat: Labout force survey (LFS); Laeken indicator.

Eurostat; WHO; OECD. PHnut project, Workhealth project.

1.2.3   Income distribution

Justification for selection: income level is one of the important elements of SES as a determinant of health, and well measurable.

Children below poverty line; UW-10, UW-21.

% of children living in households with income below 60% of national median, in at least two of the previous three years; by gender, 5y age groups < 17.

Household surveys.

Child project.

Income distribution; UW-16.

80/20 share ratio of total income by quintile. Workhealth project inventory: also variables on payment systems.

Workhealth project.

Income of intellectually disabled; UW-12.

Pomona project: income and source of income; to be worked out.

Pomona project.

Population below poverty line; UW-0, UW-5, UW-14, UW-21.

Eurostat: % of population with income below 60% of national median.

Survey.

Eurostat: Laeken indicator. PHnut project.

1.2.4 Household situation

Population by household situation, justification for selection: household situation is an important socio-economic determinant of health, and well measurable.

Children with single-parent; UW-10, UW21.

% of children in single-parent household; by gender, 5y age groups <17.

Census; household survey.

Child project.

Living arrangements of intellectually disabled; UW-12.

Pomona project: Proportion of intellectually disabled living in six different arrangements (residential settings etc.).

Registers, survey.

Pomona project.

Population by household situation; UW-18.

% of households (or persons?) in each of 5 classes: 1-person, one parent, couples with/without children, other. Eurostat indicator; by gender, age, region.

Registry; survey

Eurostat.

1.2.5   Ethnic origin citizenship

Population by ethnicity; justification for selection: etnicity or nationality may be associated with specific health situations or problems.

Children seeking asylum; UW-10.

% of children seeking asylum, alone or as part of a family, per 1000 resident children; by gender, 5y age groups < 17.

Child project.

Mothers by country of origin; UW-9.

for development.

Civil/medical birth registries; perinatal health surveys.

Peristat project.

Population by ethnic origin and/or citizenship; UW-5, UW-21.

General: which definitions feasible? Only 'nationality'?

Immigration and population data.

1.2.6   General economics

GDP PPP

GDP; UW-5.

2 Health status

This class contains various aspects of the health situation of the population. It includes mortality as well as morbidity with its functional consequences. It includes both general and disease-specific indicators.

2.1 Mortality

2.1.1 Life expectancy & related indicators

Chance of dying in age intervals.

0-5-15-45-65-85-+, by gender;

WHO: 0-5, per 1000 live births, by gender.

Mortality data.

Eurostat.

Life expectancy of intellectually disabled; UW-12.

Pomona project: At birth, ages 1, 15, 45, 65, 75, by gender, by level of intellectual disability, separate for Down's syndrome.

Pomona project.

Life expectancy; UW-0, UW-18.

WHO-HFA: At birth, ages 1, 15, 45, 65, by gender and total; Wiesler's method. For shortlist: at birth and 65.

Mortality data. Also Laeken indicator. Also Eurostat Sustainable Development indicator.

Eurostat, HFA, OECD; calculations done by WHO and Eurostat give different results; resolve! Eurochip: present lifetables.

2.1.2 General mortality

Death rates are basic indicators for health; even more so are age-specific mortality rates, especially of younger age groups.

Death rates (crude) by age; UW-10; UW-18.

Deaths per 100,000 population; by gender and 5-year age band; SES project: use for SES comparison; Child project: Crude rate age 0-5 per 1000 live births, crude rate age 0-20 per 100,000 population; by gender, SES.

By gender, SES.

Mortality data.

Child project; SES project.

Death rates (crude); Eurostat 65 causes; see under mortality cause-specific.

Crude rate; for 17 ICD chapters and some subdivisions: All infectious/parasitic, tuberculosis, meningitis, AIDS, viral hepatitis. All cancers, lip-oral-pharynx, oesophagus, stomach, colon, ano-rectal, liver & intrahepatic bile ducts, pancreas, larynx/trachea/bronchus/lung, melanoma, breast, cervix, other uterus, ovary, prostate, kidney, bladder, lymphatic & haematopoietic tissue. All causes blood/immunology. All endocrine, diabetes. All mental/behavioral, alcohol abuse, drug dependence. All nervous/sense, meningitis other than under infectious. All circulatory, ischaemic heart disease, other heart disease, stroke. All respiratory, influenza, pneumonia, COPD, asthma. All digestive, stomach/duodenum ulcer, chronic liver disease. All musculoskeletal, reumatoid arthritis and osteoarthritis. All congenital malformations, nervous system, circulatory system. All symptoms, sudden infant death, unknown causes. All external, transport, falls, poisoning, suicide, homicide, undetermined. By gender, 5-year age bands, region. Workhealth project inventory: 18-65 years old, by occupation, branch (definition?).

Mortality data.

Eurostat. Workhealth project.

Death rates standardised (SDR), Eurostat 65 causes, ages 0-65, 65+; see mortality cause-specific; UW-0, UW-18.

Standardised rates; for 17 ICD chapters and some subdivisions: infectious/parasitic: tuberculosis, meningitis, AIDS, viral hepatitis; cancers: oral, oesophagus, stomach, colon, ano-rectal, liver, pancreas, lung, melanoma, breast, cervix, other uterus, ovary, prostate, kidney, bladder, haematopoietc tissue; endocrine: diabetes; mental/behavioral: alcohol abuse, drug dependence; nervous/sense: other meningitis; circulatory: ischaemic heart disease, other heart disease, stroke; respiratory: influenza, pneumonia, COPD, asthma; digestive: stomach/duodenum ulcer, chronic liver disease; musculoskeletal: reumatoid arthritis and osteoarthritis; congenital: nervous system, circulatory system; symptoms: SID, unknown; external: transport, falls, poisoning, suicide, homicide, undetermined. By gender, region.

Mortality data; by gender and 5-year age band.

Eurostat; Use European standard population. Some causes of death also in WHO, OECD.

Death rates standardized (SDR); UW-3.

Standardized rate all deaths; 0-64, 65+, by gender, by region. Use European standard population.

Mortality data, by gender and 5-year age band.

Eurostat.

Inequality in deaths; UW-21

Rate ratios and absolute rate differences. SES project: preferably by extreme groups for educational or occupational class.

SES project.

PYLL Eurostat 65 causes; see mortality cause-specific.

PYLL (potential years of life lost); calculate by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State'; to be decided! Also as fraction of total PYLL. For 17 ICD chapters and some subdivisions: infectious/parasitic: tuberculosis, meningitis, AIDS, viral hepatitis; cancers: oral, oesophagus, stomach, colon, ano-rectal, liver, pancreas, lung, melanoma, breast, cervix, other uterus, ovary, prostate, kidney, bladder, haematopoietc tissue; endocrine: diabetes; mental/behavioral: alcohol abuse, drug dependence; nervous/sense: other meningitis; circulatory: ischaemic heart disease, other heart disease, stroke; respiratory: influenza, pneumonia, COPD, asthma; digestive: stomach/duodenum ulcer, chronic liver disease; musculoskeletal: reumatoid arthritis and osteoarthritis; congenital: nervous system, circulatory system; symptoms: SID, unknown; external: transport, falls, poisoning, suicide, homicide, undetermined. By gender, region.

Mortality data.

Eurostat.

2.1.3   Infant and perinatal deaths

Death rates are basic indicators for health; even more so are age-specific mortality rates, especially of younger age groups.

Causes of perinatal mortality; UW-9.

For development.

Peristat project: development.

Fetal mortality; UW-9.

Fetal mortality rate; no. of fetal deaths at/after 22 weeks/1000 live + stillbirths in a given year; by gestational age, birth weight and plurality.

Mortality data; civil/medical registers.

Peristat project: sensitive to underreporting at low gestational ages.

Infant mortality; UW-0; UW-9, UW-10.

Eurostat, WHO-HFA: Deaths under 1 year per 1000 live births; by gender, SES; Peristat: deaths under 1 year after live births at or after 22 completed weeks of gestation, per 1000 live births. Also by gestational age, birth weight, plurality.

Mortality data; civil/medical registers.

Eurostat, HFA, OECD; Child project; Peristat project. Also in Social Protection Committee indicators.

Neonatal mortality; UW-9.

WHO-HFA: no. of deaths under 28 days per 1000 live births; subdivide by early (0-6 days), and late (7-27 days). Normally include births over 500 g birthweight. Additional from Peristat: by gestational age, birth weight and plurality; only births of at least 22 week gestation.

Mortality data; civil/medical registers.

Peristat project.

Perinatal mortality (fetal deaths and early neonatal mortality); UW-0, UW-9.

Eurostat, HFA: fetal deaths (over 1000 g) plus early neonatal deaths (0-6 days) per 1000 live + stillbirths. Peristat: fetal deaths at/after 22 weeks gestation, per 1000 live- and stillbirths; and early neonatal deaths (0-6 days) at/after 22 weeks gestation, per 1000 live births; to be calculated separately. Peristat project does not officially recommend perinatal mortality rate, although the indicators neonatal and fetal mortality can be combined to compute a perinatal mortality rate.

Mortality data; civil/medical registers.

Eurostat, HFA; Peristat project. Also in Social Protection Committee indicators.

Postneonatal mortality.

WHO-HFA: Deaths 28 days – 1 year per 1000 live births.

Mortality data; civil/medical registers.

Eurostat. Peristat project.

2.2   Mortality Cause-specific

For the causes of death we follow the 65 European shortlist established by Eurostat; this includes all ICD chapters plus a few main groups within these which represent a large share of total mortality. This shortlist was also selected for applicability of regional and age/gender partitions, and for usability across ICD versions. In addition, some specific causes are selected beyond the 65 Eurostat shortlist, as recommended by HMP projects, or as not assignable to a single ICD chapter.

2.2.1   Infectious/parasitic

Mortality AIDS; UW-0

In Eurostat 65 causes; ICD10: B20-B24; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to

be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality all causes infectious/parasitic diseases; UW-0, UW-10.

In Eurostat 65 causes; ICD10: A00-B99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality meningitis; UW-0.

In Eurostat 65 causes; ICD10: A39; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality tuberculosis; UW-0.

In Eurostat 65 causes; ICD10: A15-A19, B90; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality viral hepatitis; UW-0.

In Eurostat 65 causes; ICD10: B15-B19; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

2.2.2 Neoplasms

Mortality all childhood cancers; UW-2, UW-10.

Crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of

life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES; also survival acute lymphatic leukemia.

Mortality data.

CHILD project.

Mortality all neoplasms; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C00-D48; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality anorectal cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C19-C21; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality bladder cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C67; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality brain/CNS cancer; UW-2.

In 23 cancer causes of Camon project; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Camon project.

Mortality breast cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C50; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality cancer of head/neck; UW-2.

In 23 cancer causes of Camon project; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Camon project.

Mortality cancer of lanynx/trachea/bronchus/lung; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C32-C34; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality cancer of the gallbladder; UW-2.

In 23 cancer causes of Camon project; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Camon project.

Mortality cancer of the lip, mouth, pharynx; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C00-C14; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality cancer of the liver and intrahepatic bile ducts; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C22; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality cancer of the lymphatic & haematopoietc tissue; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C81-C96; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality cervix cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C53; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality colon cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C18; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality Kaposi's sarcoma; UW-2.

In 23 cancer causes of Camon project; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Camon project.

Mortality kidney cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C64; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality melanoma; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C43; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality mesothelioma; UW-2.

In 23 cancer causes of Camon project; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Camon project.

Mortality oesophagus cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C15; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality other uterus cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C54-C55; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality ovary cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C56; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality pancreas cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C25; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality prostate cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C61; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality stomach cancer; UW-0, UW-2.

In Eurostat 65 causes; ICD10: C16; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Mortality testis cancer; UW-2.

In 23 cancer causes of Camon project; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Camon project.

Mortality thyroid cancer; UW-2.

In 23 cancer causes of Camon project; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: crude rate by ages 0, 1-4, 5-9, 10-14, 15-17, and SES.

Mortality data.

Camon project.

2.2.3 Blood/immunology

Mortality all causes blood/immulology; UW-0.

In Eurostat 65 causes; ICD10: D50-D89; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.4 Endocrine

Mortality all causes endocrine, nutritional, metabolic diseases; UW-0.

In Eurostat 65 causes; ICD10: E00-E90; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality diabetes; UW-0, UW-3.

In Eurostat 65 causes; ICD10: E10-E14; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. EUDIP project: include deaths with diabetes as primary or any cause of death (which is more than intended in the Eurostat 65 causes).

Mortality data.

EUDIP project.

2.2.5   Mental/behavioural

Mortality alcohol abuse; UW-0.

In Eurostat 65 causes; ICD10: F10; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality all causes mental & behavioral disorders; UW-0.

In Eurostat 65 causes; ICD10: F00-F99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality drug dependence; UW-0.

In Eurostat 65 causes; ICD10: F11-F16, F18-F19; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.6   Nervous system/sense

Mortality all causes nervous system/sense diseases; UW-0.

In Eurostat 65 causes; ICD10: G00-H95; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality meningitis other than under infectious diseases; UW-0.

In Eurostat 65 causes; ICD10: G00-G03; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.7　　Circulatory system

Mortality acute coronary syndromes; UW-4.

ICD9: 410-411; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Eurociss project.

Mortality all causes circulatory system; UW-0, UW-4.

In Eurostat 65 causes; ICD10: I00-I99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality AMI (acute myocardial infarction); UW-4.

ICD9: 410; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Eurociss project.

Mortality ischaemic heart disease; UW-0, UW-4.

In Eurostat 65 causes; ICD10: I20-I25; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality other heart disease; UW-0, UW-4.

In Eurostat 65 causes; ICD10: I-30-I33, I39-I52; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality stroke; UW-0, UW-4.

In Eurostat 65 causes; ICD10: I60-I69; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.8 Respiratory system

Mortality all causes respiratory system; UW-0.

In Eurostat 65 causes; ICD10: J00-J99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. Also Eurostat Sustainable Development Indicator.

Mortality data.

Mortality asthma; UW-0, UW-5.

In Eurostat 65 causes; ICD10: J45-J46; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. IMCA project: also of asthma as contributing cause of death. OECD health care quality: mortality age 5-39 as quality indicator.

Mortality data.

IMCA project. OECD health care quality project.

Mortality COPD; UW-0, UW-5.

In Eurostat 65 causes; ICD10: J40-J47; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. IMCA project: exclude J45, J46; include COPD as a contributing cause of death.

Mortality data.

IMCA project.

Mortality influenza; UW-0.

In Eurostat 65 causes; ICD10: J10-J11; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality pneumonia; UW-0.

In Eurostat 65 causes; ICD10: J12-J18; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.9 Digestive system

Mortality all causes digestive system; UW-0.

In Eurostat 65 causes; ICD10: K00-K93; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality chronic liver disease; UW-0.

In Eurostat 65 causes; ICD10: K70, K73-K74; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality ulcer of stomach, duodenum; UW-0.

In Eurostat 65 causes; ICD10: K25-K28; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.10 Skin

Mortality all causes skin diseases; UW-0.

In Eurostat 65 causes; ICD10: L00-L99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.11 Musculoskeletal system

Mortality all causes musculoskeletal system; UW-0.

In Eurostat 65 causes; ICD10: M00-M99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality rheumatoid arthritis & osteoarthritis; UW-0, UW-6.

In Eurostat 65 causes; ICD10: M05-M06, M15-M19; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.12 Genito-urinary system

Mortality all causes genito-urinary system; UW-0.

In Eurostat 65 causes; ICD10: N00-N99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.13 Pregnancy

Mortality all causes pregnancy, childbirth, puerperium; UW-0.

In Eurostat 65 causes; ICD10: O00-O99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality maternal; UW-9.

Crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by

difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender of delivery. WHO: mortality of women per 100.000 live births, by any cause, during pregnancy or within 42 days after termination of pregnancy, by maternal age, delivery mode. Peristat project: extend to 1 year. Development: by 10 separate causes.

Mortality data. Audits, confidential enquiries.

Peristat project.

2.2.14 Perinatal conditions

Mortality all causes conditions from perinatal period; UW-0, UW-9, UW-10.

In Eurostat 65 causes; ICD10: P00-P96; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES. Peristat: to be developed.

Mortality data.

CHILD, Peristat projects.

2.2.15 Congenital malformations

Mortality all causes congenital malformations; UW-0, UW-9, UW-10.

In Eurostat 65 causes; ICD10: Q00-Q99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES. Peristat: to be developed.

Mortality data.

CHILD, Peristat projects.

Mortality congenital malformations circulatory system; UW-0, UW-10.

In Eurostat 65 causes; ICD10: Q20-Q28; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES.

Mortality data.

CHILD project.

Mortality congenital malformations nervous system; UW-0, UW-10.

In Eurostat 65 causes; ICD10: Q00-Q07; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES.

Mortality data.

CHILD project.

2.2.16 Symptoms

Mortality sudden infant death syndrome; UW-0, UW-10.

In Eurostat 65 causes; ICD10: R95; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES.

Mortality data.

CHILD project.

Mortality symptoms, ill-defined causes; UW-0.

In Eurostat 65 causes; ICD10: R00-R99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality unknown causes; UW-0.

In Eurostat 65 causes; ICD10: R96-R99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

2.2.17 External causes

Mortality accidental falls; UW-0.

In Eurostat 65 causes; ICD10: W00-W19; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in

the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender.

Mortality data.

Mortality accidental poisoning; UW-0, UW-10.

In Eurostat 65 causes; ICD10: X40-X49; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES.

Mortality data.

Mortality all external causes; UW-0, UW-8, UW-10.

In Eurostat 65 causes; ICD10: V01-Y89; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES; specify burns and drownings. WP Accidents/injuries: injuries as % of total deaths; age bands 0-14, 15-64, 65+.

Mortality data.

CHILD project. Working Party Accidents & Injuries.

Mortality fatal accidents at work; UW-16.

Incidence rates per 100,000. Workhealth project: By age, gender, cause of accident, branch, occupation.

Registers.

Eurostat-ESAW. Workhealth project.

Mortality homicide, assault; UW-0, UW-8, UW-10.

In Eurostat 65 causes; ICD10: X85-Y09; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES.

Mortality data.

Mortality suicide & intentional self-harm; UW-0, UW-1, UW-10.

In Eurostat 65 causes; ICD10: X60-X84; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to

be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES. Also Eurostat Sustainable Development Indicator.

Mortality data.

Mortality transport accidents; UW-0, UW-8, UW-10, UW-15.

In Eurostat 65 causes; ICD10: V01-99; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES. WP accidents/injuries: age bands 0-14, 15-64, 65+. Environment/health project: include delayed deaths (<30 days)

Mortality data.

Environment/health, CHILD projects; WP accidents/injuries.

Mortality undetermined intent; UW-0, UW-1.

In Eurostat 65 causes; ICD10: Y10-Y34; crude death rates; standardized death rates 0-64 and 65+, by region; PYLL (potential years of life lost), to be calculated by remaining life expectancy in the respective Member State, or by difference with life expectancy in 'top EU Member State' (to be decided!); PYLL as fraction of total PYLL. By gender. CHILD project: by ages 0, 1-4, 5-9, 10-14, 15-17, and by SES.

Mortality data.

2.2.18 Certain specific (avoidable) causes

Alcohol-related deaths; UW-0, UW-1, UW-21.

Eurostat 65 COD includes F10, 'alcohol psychosis/chronic alcohol abuse'. This is only a small part of alcohol-related mortality. ECHI prefers (preliminary) recommendation by Working Party Mental Health: ICD-10: F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K86.0, O35.4, P04.3, X45. Eurostat, feasible? Does not include alcohol-related traffic deaths; see project Environment/health. WHO: all ICD-causes in which alcohol is implicated, i.e. not alcohol-attributable deaths.

COD statistics

Eurostat; WHO. Working Party mental health.

Drugs-related deaths; UW-0, UW-1, UW-21.

Eurostat 65 causes of death includes ICD-10 F11-F16 (drug dependence). EMCDDA definition: acute drug-related deaths preferable.

EMCDDA; Eurostat. Working party mental health.

Smoking-related deaths; UW-0.

WHO: all ICD causes in which smoking is implicated, which is not 'smoking attributed deaths', and thus a severe overestimate. To be further developed.

COD statistics.

WHO.

Temperature-associated mortality; UW-15, UW-18.

Excess deaths during periods of extreme high or low temperatures. Calculated from mortality data and climate data.

Mortality data, climate data.

Environment/health project.

2.3   Morbidity Disease-specific

Diseases/disorders (including injuries) are selected as (i) associated with large population burden or (ii) representing specific avoidable causes. Included are suggestions by many HMP projects which may not always meet these criteria.

The indicator is either incidence or prevalence (or both) depending on the nature of the disease/disorder.

Many sources are possible, e.g. specific registers, notification systems, hospital discharge data, primary care data, insurance data, health examination.

2.3.1   Infectious/parasitic

Creutzfeld-Jacob disease, incidence.

By gender, age, region, SES.

Notification system.

Hepatitis B incidence.

By gender, age, region, SES.

Notification system.

HIV seroprevalence in pregnant women; UW-11.

% tested women found positive. By age, region, SES.

Specific surveys.

Reprostat project.

HIV/AIDS; UW-0

Incidence (prevalence)

Registry; EuroHIV data

Eurostat; WHO; OECD

Measles incidence; UW-10.

By gender, age, region, SES. CHILD project: use indicator as tracer for vaccination effectiveness.

Notification system.

CHILD project.

Meningitis incidence; UW-10.

By gender, age, region, SES. CHILD project: use indicator as tracer for vaccination effectiveness.

Notification system.

CHILD project.

Sexually transmitted diseases (esp. Chlamydia); UW-11.

% positive age 15-19, by gender, region, SES.

Specific surveys.

Reprostat project.

Tuberculosis incidence; UW-10.

By gender, age, region, SES.

Notification systems.

Vaccination scheme diseases, incidence; UW-22.

By gender, age, region, SES.

Notification system.

OECD health care quality project. Also in Social Protection Committee indicators.

2.3.2 Neoplasms

Cancer colorectal, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip pojects.

Cancer melanoma, incidence; UW-2, UW-15.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the mouth/pharynx/larynx, incidence; UW-2, UW-7.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care. Oral health project: ages 35-64, lip, oral cavity, pharynx, ICD-10: C00-C14.

Cancer registries.

Camon, Eurochip, Oral health projects.

Cancer of the bladder, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the brain/CNS, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the breast, incidence; UW-0, UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES.

Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Eurostat, WHO, OECD. Camon, Eurochip projects.

Cancer of the cervix uteri, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

WHO. Camon, Eurochip projects.

Cancer of the endometrium, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the gall bladder, biliary tract, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the kidney, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the liver, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the lung/larynx/trachea/bronchus, incidence; UW-0, UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Eurostat, WHO, OECD. Camon, Eurochip projects.

Cancer of the oesophagus, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the ovary, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the pancreas, UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the prostate, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the stomach, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the testis, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer of the thyroid, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer total, incidence; UW-2, UW-18.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries. EuroREVES: health interview survey.

Camon, Eurochip, EuroREVES projects.

Cancer, Kaposi's sarcoma, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer, leukemia, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer, lymphomas, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer, mesothelioma, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Cancer registries.

Camon, Eurochip projects.

Cancer, multiple myeloma, incidence; UW-2.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care.

Camon, Eurochip projects.

Cancers of the childhood, incidence; UW-2, UW-10.

Basically incidence; where possible or useful also prevalence. By gender, age, region, SES. Eurochip project: also stage at diagnosis, % of cases confirmed microscopically. For survival rates, see under quality of care. CHILD project: ages 0-14 and 15-17.

Cancer registries.

Camon, Eurochip, CHILD projects.

2.3.3 Blood/immunology

2.3.4 Endocrine

Blindness in diabetics, UW-3.

Annual incidence of blindness from diabetes as share of total incidence of blindness. By gender, age, region, SES.

Registries.

EUDIP project.

Diabetes type 1 in children, UW-3, UW-10.

Incidence by age per 100,000 population, age 0-14. CHILD project: ages 0-4, 5-9, 10-14, 15-17.

Registries, special surveys.

EUDIP, CHILD projects.

Diabetes; UW-0, UW-3, UW-10, UW-18.

Prevalence of all types of diabetes. By gender, age, region, SES. CHILD project: ages 0-4, 5-9, 10-14, 15-17. EUDIP: ICD-10, E10-E14, use data on precise diagnosis, medication, diets, glucose measurement.

Registries; primary care records; special surveys HIS/HES. Eurostat: International Diabetes institute.

Eurostat; WHO. Eudip, CHILD, EuroREVES, Primary Care projects.

Nephropatry in diabetics, UW-3, UW-18.

% of diabetics with ESRF serum creatinine > 400 umol/liter last 12 months. By gender age, region, SES.

Registries.

EUDIP project.

Retinopathy in diabetics; UW-3, UW-18.

% of diabetics with proliferative retinopathy last 12 months. By gender, age, region, SES.

Registries.

EUDIP project.

2.3.5 Mental/behavioural

Alcohol-related disorders; UW-1.

12 month prevalence. By gender, age, region, SES. Mental health WP: use CAGE questionnaire for 'alcohol dependence'. Also CIDI instrument.

Survey.

Mental health Working Party.

Anxiety disorder, generalized; UW-1, UW-17, UW-18.

12 month prevalence, by CIDI instrument. By gender, age, region, SES.

Population survey (CIDI instrument). EuroREVES: also as single question on depression/anxiety.

Mental health & EuroREVES projects.

Dementia/Alzheimer; UW-0; UW-18.

12 mnth prevalence. By gender, age, region, SES.

Surveys; registries. Eurostat: data from Alzheimer Europe.

Mental health project.

Depression; UW-0, UW-1, UW-17, UW-18.

12-month prevalence, by CIDI instrument. By gender, age, region, SES.

Population survey (CIDI instrument). EuroREVES: also by single question on depression/anxiety.

Mental health project. EuroREVES, Primary Care   projects.

Intellectual disability; UW-12.

Prevalence. See Pomona project for definition. Also co-morbidity with epilepsy, dental health, various psychiatric disorders, challenging behaviour, visual and hearing impairments, mobility impairments;

Special surveys.

Pomona project.

Post-partum depression, UW-9.

Peristat: for development.

Specific surveys.

Peristat project.

Suicide attempt; UW-0, UW-1, UW-10, UW-17.

Lifetime prevalence; by CIDI questionnaire. By gender, age, region, SES; specify for children.

Survey.

Mental health project and WP; WP Accidents/injuries. CHILD project.

2.3.6　　　Nervous system/sense

Cataract; UW-12.

12 month prevalence, by gender, age, region, SES.

Interview survey.

EuroREVES project.

Migraine or frequent headache.

12 month prevalence, by gender, age, region, SES.

Interview survey.

EuroREVES project.

2.3.7　　　Circulatory system

Acute coronary syndromes; UW-4.

Incidence/attack rate per 100.000. By gender, age, region, SES.

Hospital discharge data

Eurociss project.

Acute myocardial infarction (AMI); UW-0, UW-4, UW-18.

Incidence/attack rate per 100.000. By gender, age, region, SES. Eurociss project: also 1-hour, 24-hour, 28-day case-fatality rates; rates by AMI subtype; prevalence. EuroREVES: prevalence by interview survey.

hospital discharge data combined with mortality; if possible population-based registers. Interview survey for single question.

Eurociss project; hospital data project. EuroREVES project.

Effort angina; UW-4.

Prevalence. By gender, age, region, SES.

Hospital discharge data.

Eurociss project.

Heart failure; UW-4, UW-18.

Incidence, prevalence. By gender, age, region, SES.

Hospital discharge data.

Eurociss project.

Other heart disease (rheumatic, atherosclerosis); UW-4.

Incidence, prevalence. By gender, age, regio, SES.

Hospital discharge data.

Eurociss project.

Stroke; UW-0, UW-4, UW-18.

Incidence/attack rate per 100,000. By gender, age, region, SES. Eurociss project: also 7-day, 28-day case-fatality rates; rates by stroke subtype hemorragic, ischemic); prevalence. EuroREVES: prevalence by interview survey.

Hospital discharge data combined with mortality; preferably population-based registers. Interview survey for single question.

Eurociss project, hospital data project. EuroREVES, Primary Care projects.

2.3.8 Respiratory system

Asthma; UW-0, UW-5, UW-10.

Prevalence by symptoms, attacks and diagnosis, as defined by IMCA project. EuroREVES project recommends single survey question on prevalence of asthma and allergic asthma. CHILD project: specify for children ages 0-4, 5-9, 10-14, 15-17. IMCA project: prevalence of asthma symptoms, attacks, physician-diagnosed asthma. Also asthma severity by various methods. Also Eurostat Sustainable Development Indicator.

Special surveys preferred; general HIS/HES or GP networks second best proxies.

IMCA, EuroREVES, CHILD, IMCA, Primary Care projects.

COPD; UW-0, UW-5, UW-18.

COPD = chronic obstructive pulmonary disease; prevalence by symptoms and diagnosis; by gender, age, region, SES. IMCA project: prevalence of chronic symptoms, chronic bronchitis, airway obstruction, physician-diagnosed COPD. Also COPD severity by various methods. Also Eurostat Sustainable Development Indicator.

Special population surveys preferred. General HIS/HES or GP networks are second best proxies.

WHO. IMCA project, EuroREVES project.

2.3.9 Digestive system

Dental health; UW-7, UW-10.

Mean DMFT index (WHO: No. of decayed, missing or filled teeth at age 12; CHILD project: at ages 5 and 12); alternative (WHO): % of caries-free children at age 5 or 6. Oral health project: % Early childhood caries age group 1-5 years. Mean number of decayed, missing, filled first permanent molars in children at 6 and 12 years of age. % Of 12-year old children according to fluorosis Dean's index score. % Children, adults (2-4, 6-8, 12, 15, 35-44 age) with untreated dentine decay teeth. % Population age 5-74 with no obvious decay experience. Mean number of decayed, missing, filled teeth per person, ages 5-74. % Population aged >=18 with >= 21 teeth in functional occlusion. % population >=18 with no natural teeth. % population >35 yeras who lost all natural teeth.

School health services. Registers, surveys.

CHILD, Oral health projects

Gastric or duodenal ulcer.

12 month and lifetime prevalence, by gender, age, region, SES.

Interview surveys (EuroREVES), registries.

EuroREVES project.

Periodontal health; UW-7.

% population (ages 12, 15, 18, 35-44, 65-74) with 4 categories of gingivitis, pockets. % population age 35-74 with periodontal disease any grade.

Sample registries, surveys.

Oral health project.

Removable denture; UW-7.

% population with removable denture.

Surveys.

Oral health project.

Water- and foodborne infections; UW-18.

Incidence, by gender, age, region, SES. WHO: also number of outbreaks. Also Eurostat Sustainable Development Indicator.

Registries.

WHO.

2.3.10   Skin

2.3.11　　　　　Musculoskeletal system

Osteoarthritis, UW-6, UW-18.

Prevalence for OA of hip and knee, as most important for disability and care needs (MSC project). By gender, age, region, SES.

Health interview + health examination survey. EuroREVES project recommends single interview question covering both RA and osteoarthitis.

Musculoskeletal conditions project, EuroREVES project.

Rheumatoid arthritis, UW-6.

Incidence, prevalence, based on clinical diagnosis. By gender, age, region, SES.

Health examination survey + laboratory test. EuroREVES project recommends single interview question covering both RA and osteoarthitis.

Musculoskeletal Conditions project. EuoREVES project.

2.3.12　　　　　Genito-urinary system

Erectile dysfunction; UW-11.

% men reporting ED age 40-70. In additional set Reprostat project.

Survey.

Reprostat project.

Urinary incontinence, UW-11.

% women reporting UI at least one episode/month in three previous months, 40-49 of age. In additional set of Reprostat project.

Survey.

Reprostat project.

2.3.13　　　　　Pregnancy

Deliveries after ART (assisted reproductive technology); UW-11.

% women delivering live or stillborn after ART (range of techniques). By age. Rprostat project not in core set.

Birth and ART registers linked.

Reprostat project.

Fecal incontinence, chronic; UW-9.

For development.

Peristat project.

Problems in getting pregnant.

% of women age 15-49 trying to get pregnant > 1 year. By age. In core set of Reprostat project.

Survey.

Reprostat project.

Severe maternal morbidity; UW-9.

For development.

Peristat project.

Trauma to perineum; UW-9.

For development.

Peristat project.

2.3.14   Perinatal conditions

APGAR score; UW-9.

Distribution at 5 minutes after birth.

Birth registries, perinatal health surveys, hospital discharge data.

Peristat project.

Birth weight (low); UW-0, UW-9.

HFA: % of live borns weighing 2500 g or more; Peristat: proportion of births within 500 g intervals, by vital status at birth, gestational age, plurality. Peristat: classify gestational age by (live and stillbirths) 22-36 weeks (preterm), 37-41 weeks (term), 41+ weeks (possterm).

Birth registries, perinatal health surveys, hospital discharge data.

HFA; OECD. Peristat project

Cerebral palsy; UW-9.

Prevalence. For development.

Birth registries, perinatal health surveys, hospital discharge data.

Peristat project.

Hypoxic-ischemic encephalopathy; UW-9.

Prevalence. For development.

Birth registries, perinatal health surveys, hospital discharge data.

Peristat project.

Multiple birth rate; UW-9.

% of maternities following multiple gestation, including stillbirths, by number of fetuses.

Birth registries, perinatal health surveys, hospital discharge data.

Peristat project.

Pre-term births; UW-9.

% of live and stillbirths divided by 22-27, 28-31, 32-36 weeks, by vital status and plurality. Singleton preterm rate is best suited for country comparisons.

Birth registries, perinatal health surveys, hospital discharge data.

Peristat project.

2.3.15 Congenital malformations

Downs syndrome; UW-9.

% of live birth, fetal deaths and induced abortions with Down's.

Registries (Eurocat).

Peristat project.

Neural tube defects; UW-9.

% of live births, fetal deaths and induced abortions with neural tube defects.

Registries (Eurocat).

Peristat project.

2.3.16 Symptoms

2.3.17 External causes

Alcohol-related traffic accidents: UW-8.

Number per 100,000 population.

Combination of sources.

WHO.

Burns in children; UW-10.

Overnight in-patient admissions per 100,000 population. by gender; age 0-4, 4-9, 10-14, 15-17; region; SES.

Hospital data.

CHILD project.

Hip fractures; UW-6, UW-18.

Incidence. By gender, age, region, SES.

Medical registries.

Injuries: home/leisure; violence; UW-0, UW-8, UW-18.

Incidence. Working Party Accidents/Injuries: possibly based on hospital discharges. Further work needed.

Working Party Accidents/injuries: primarily hospital discharges. Eurocost project: best comparability on hospital data and emergency department data.

Eurostat; WHO; OECD. WP accidents and injuries. Eurocost project (costs of injuries).

Injuries: road traffic; UW-0, UW-8, UW-15.

Incidence.

Eurocost project: best comparability on hospital data and emergency department data.

Eurostat; OECD. Working Parties on Accidents/Injuries; on Environment and Health. Eurocost project (costs of injuries)

Injuries: workplace; UW-0, UW-8, UW-16.

Incidence. Workhealth project: for accidents at work follow Eurostat/ESAW; less than 4 days absence from work: Labour Force Survey; more than 3 days absence from work: national registers. By age, gender, branch/occupation, cause of accident. Supported by Working Party Accidents/Injuries.

Registers, surveys. Eurocost project: best comparability on hospital data and emergency department data.

Eurostat-ESAW. Workhealth project; Working Party Accidents/injuries. Eurocost project (costs of injuries).

Long-bone fractures in children; UW-10.

Number per 100,000 population. By gender; ages 10-14, 15-17; region, SES.

Data from hospitals and emergency departments.

CHILD project.

Poisoning in children; UW-10.

Overnight in-patient admissions per 100,000 population. By gender; ages 0-4, 5-9, 10-14, 15-17; region; SES.

Hospital data.

CHILD project.

2.3.18   Certain specific (avoidable) causes

Occupational disease; UW-16.

Eurostat: Incidence of 35 specific causes, per 100,000 population (EODS). WHO: '.. such as dermatosis, silicosis, asthma, cancer, infections, poisonings, consequences of noise, vibration, excessive loads, etc.'. Also: prevalence of work-related health problems, by gender, age, main diagnostic groups and work absence status (Labour Force Survey). To be further defined by Workhealth project.

Eurostat: EODS (European Statistics on Occupational Disease), Surveys.

Eurostat (EODS). Workhealth project.

2.4   Perceived and functional health

This section includes indicators not based on ICD-categories but rather on subjective notions of health and the functional consequences of health as e.g. defined by the ICF (International Classification of Functioning). Indicators are selected as covering the important domains of human functioning, as related to health. This includes the physical, mental and social aspects of health. It also includes the notion of health-related quality of life. The ECHI group notes that this section contains very little focus on the specific situation of children.

2.4.1   Perceived health

Perceived general health; UW-0, UW-17.

Prevalence by up to 5 response categories from WHO question (how is your health in general? very good/good/fair/bad/very bad); by gender, age, SES, region. Laeken indicator: by income.

Survey. In Eurostat SILC, Minimal European Health Module. The question is standard but the interpretation subject to cultural bias.

Eurostat; WHO; OECD. Euro-REVES project. Also Eurostat Sustainable Development Indicator. Also in Social Protection Committee indicators.

Perceived sexual health; UW-11, UW-17.

For development.

Reprostat project.

2.4.2 Chronic disease general

Chronic illness or condition, general; UW-0, UW-17.

12 month prevalence; open question.

Survey. In Eurostat SILC, Minimal European Health Module.

Eurostat. EuroREVES project. Also in Social Protection Committee indicators.

Chronic illness or condition, specified.

12 month or lifetime prevalence. By gender, age, region, SES. Single question on the conditions (also mentioned under 'morbidity, disease-specific'): asthma, allergic asthma, allergy (excl. asthma), diabetes, cataract, hypertension, heart attack, stroke, chronic bronchitis, emphysema, arthrosis, (rheumatic) arthritis, osteoporosis, gastric & duodenal ulcer, malignant tumour, migraine/frequent headache, chronic anxiety or depression.

Interview survey.

EuroREVES project.

General musculoskeletal pain; UW-0, UW-6.

Prevalence; survey instrument proposed by project musculoskeletal disorders.

HIS.

Musculoskeletal disorder project.

2.4.3 Functional limitations

Functional limitations; preferably items should include all relevant domains of ICF (see WHO/HQ questionnaire) in the proposals in this section are missing: excretion (incontinence), fertility/sexual functions, sleep, pain, personal relations, social functioning; the latter 2 are covered under social determinants; see also general mental health.

Limitations in function by oral health problems; UW-7.

% population age 8-65 with difficulties in eating/chewing by problems with mouth, teeth, dentures, any grade, past 12 months. Same for: perceived pain or discomfort; psychological discomfort ('felt tense'); psychological disability ('felt embarrassed'); social disability (normal work, school for ages 8-17).

Surveys.

Oral health project.

Limitations of cognitive functions; UW-17, UW-18.

Prevalence of limitations in the areas: memory (3 items), new learning, language, literacy/numeracy, attention, visuo-spatial ability, executive function. By gender, age, region, SES. Interview instrument proposed by EuroREVES.

Interview survey.

EuroREVES project.

Limitations of physical functions; UW-0, UW-6, UW-17, UW-18.

Prevalence of limitations in seeing, hearing, mobility, speaking, biting/chewing, agility; instrument proposed by EuroREVES; various other instruments in use more or less covering the area. By gender, age, region, SES.

Interview survey.

Eurostat. WHO. Euro-REVES project.

2.4.4 Activity limitations

Limitations in household activities; UW-18.

Prevalence of limitations on items: telephoning, shopping, cooking, light/heavy housework, laundry, finances. By gender, age, region, SES. Instrument proposed by EuoREVES.

Interview survey.

EuroREVES project.

Limitations in school, work, leisure, social activities, UW-18.

Prevalence of limitations on items: usual school/work/home activities, usual leisure/social activities, going out. By gender, age, region, SES. Instrument proposed by EuroREVES.

Interview survey.

EuroREVES project.

Limitations of activities due to circulatory disease; UW-4.

Eurociss project.

Limitations of personal care; UW-6, UW-18.

Prevalence of limitations in items: feeding, getting in/out of bed, dressing, toilet, bathing; with/without help. By gender, age, region, SES. Interview instrument proposed by EuroREVES.

Interview survey.

EuroREVES.

Limitations of usual activities, past 6 months, health-related; UW-0, UW-6, UW-18, UW-21.

Prevalence; GALI instrument proposed by EuroREVES project. Instrument aimed at usual situation, to ignore temporary problems. By gender, age, SES, region.

Survey; in Eurostat SILC, Minimal European Health Module.

Eurostat. EuroREVES project. Also in Social Protection Committee indicators.

2.4.5 Short-term activity restrictions

Temporary limitation of usual activities; UW-17, UW-18, UW-21.

Incidence of temporary activity limitations by health problem during past two weeks. WHO recommended instrument. By gender, age, region, SES.

Interview survey.

WHO.

2.4.6 General mental health

Happiness; UW-1, UW-17.

% population in upper 2 out of 5 response categories in 'Andrews single item happiness scale'.

Interview survey.

mental health and EuroREVES projects.

Psychological distress; UW-0, UW-1, UW-17, UW-18.

% population below cut-point of MHI-5 score, from SF-36 questionnaire.

HIS.

Eurostat. Mental health and EuroReves projects, WP mental health. Also in Social Protection Committee indicators.

Psychological well-being: UW-1, UW-17, UW-21.

% population below cutpoint. Energy-vitality scale from SF-36 questionnaire.

Interview survey.

Mental health and EuroREVES projects. WHO.

Role limitations by emotional problems; UW-1, UW-17.

Item from SF-36 questionnaire.

Interview survey.

Mental health and EuroREVES projects. WHO.

2.4.7   General quality of life

Asthma/COPD health outcomes; UW-5.

Health outcomes in COPD patients: quality of life, no. of exacerbations, emergency visits, limitations of activities (work, home/leisure), work absence. In asthma patients: same, plus asthma symptoms, lung function (FEV).

HIS, registries.

IMCA project.

Euroqol score; UW-21.

Score from Euroqol 5D instrument. Eurociss project: also Euroqol for circulatory disease patients. Alternative: WHOQOL.

Interview survey.

WHO. Eurociss.

2.4.8   Absenteeism from work

Absenteeism from work (sickness absence); UW-1, UW-16.

Incidence, by main groups of causes: mental, musculoskeletal, infectious, other. WHO: days per employee per year. Comparability problematic when data are derived from nationally different social systems. Workhealth project: also by type of employment, duration of absence; also health-related early retirement.

Preferred: interview surveys like Labour Force Surveys. Alternatives: registries, insurance data.

Eurostat, WHO. Workhealth, mental health projects. Also in Social Protection Committee indicators.

Work disability; UW-6.

Permanent and temporary work disability, by diagnosis. WHO: incidence/prevalence persons granted social (disability) benefits per 100,000. Percent of disabled (working age) engaged in regular work.

Labour Force Surveys, insurance data.

WHO. Musculoskeletal conditions project.

2.4.9 Appropriate inequality measure

2.5 Composite measures of health status

This section includes indicators which are constructed by combination of mortality and morbidity data. The latter can be in disease-specific or functional terms. Basically there are two types: (1) Health expectancies (HE), which are life-table based, and (2) DALY-type measures, based on absolute numbers of years with disease or disabilty. Especially HE-s are useful for overall comparisons of health of countries or regions.

Health expectancies other.

Health expectancies can be calculated on any prevalence, using the Sullivan method. It is especially used with data on limitations of functions and activities. An alternative approach is explouted by WHO, using severity-weighted and/or disease-specific data. This is called HALE (Health-adjusted life expectancy), it is a more advanced method but has larger data requirements.

Mortality data, interview surveys, etc.

EuroREVES project.

Health expectancy based on various parameters; UW-0, UW-21.

Calculated on life expectancy and prevalences of: perceived general health, any chronic illness, physical functioning limitations, limitations in usual activities; calculation by the Sullivan method.

Mortality data, HIS.

Eurostat; WHO; OECD. EuroREVES project.

Health expectancy, based on limitations of usual activities; UW-0

Calculated by Sullivan method based on life table and prevalence of activity limitations, past 6 months.

Mortality data, surveys

Eurostat structural indicator. EuroREVES project. Also in Social Protection Committee indicators.

3 Determinants of health

This group includes everything which determines health and disease/disorder; issues are selected because they (i) are associated with sufficient certainty to a large health problem, on population basis, and (ii) can be influenced by intervention in a sufficiently cost-effective manner.

3.1 Personal and biological factors

This group includes hereditary or acquired characteristics known as 'risk factors' or 'protective factors' towards health.

3.1.1 Biological (risk) factors

Biological (risk) factors; this group includes physical characteristics, for which a strong association with substantial health problems have been established.

Asthma/COPD biological risk factors; UW-5.

Various indicators: bronchial hyperresponsiveness; Asthma/COPD family history; sensitization to allergens; birth weight; only asthma: total IgE; only COPD: BODE index(including BMI, airway obstruction, dyspnea, exercise capacity); childhood infections; having influenza or pneumococcus vaccinations.

HIS, special investigations.

IMCA project.

Blood pressure; UW-0, UW-13, UW-18, UW-21.

% population with blood pressure over 140/90, or taking hypertension drugs (EHRM project). Also: mean/sd of systolic and diastolic blood pressure; prevalence of actual and potential hypertensives: SBP > 140 mm or DBP > 90 mm Hg, or taking hypertension drugs. By gender, age, region, SES. EHRM projects recommends additional 'secondary' indicators.

HIS/HES.

WHO special programmes. EHRM project. EuroREVES project.

Body mass index; UW-0, UW-2, UW-3, UW-5, UW-6, UW-10, UW-12, UW-13, UW-14, UW-18.

% population with BMI >= 30 kg/m2; specify for children; also cut-off at BMI 25? By gender, age, region, SES. Pomona project: separately for intellectually disabled.

HIS/HES. School health suerveys. Also Eurostat Sustainable Development indicator.

Eurostat; OECD. EHRM, Child, Eudip, PHnut, Pomona projects.

Glucose tolerance; UW-3.

Prevalence of impaired glucose tolerance.

HES, primary care.

EUDIP project.

Health-related fitness; UW-14.

Maximal aerobic power, by 2 km walking test.

walk test.

PHnut project.

Nutritional status indicators; UW-14, UW-18, UW-21.

Mean/sd of glycated Hb concentration; levels of serum ferritin, transferrin receptors, retinol, carotenoids, folate, selenium, 25-hydroxy vitamin D3, iodine, iron, sodium.

HES

EHRM, PHnut, ECAHI projects; EUDIP project ('secondary' indicators)

Osteoporosis; UW-6, UW-18.

Prevalence of low bone density. EuroREVES: single interview question. By gender, age, region, SES.

HIS/HES

Musculoskeletal conditions project, EuroREVES project.

Risk factors in diabetics; UW-3, UW-18, UW-22.

EUDIP: % with HbA1c > 7.5% last 12 months; % with total cholesterol > 5 mmol/l; % with LDL > 2.6 (3) mmol/l; % with HDL < 1.15 mmol (1) mmol/l; % with triglycerides > 2.3 (2) mmol/l; % with micralbuminuria last 12 months; % with blood pressure > 140/90 last 12 months; % with BMI > 25, > 30 kg/m2; age at diagnosis, 10-year age bands. OECD health care quality: patients with poor glucose control, i.e., % with HbA1c over 9.5% at most recent test in given year.

Diabcare, sentinel practices, reimbursements, medical registries.

EUDIP project. OECD health care quality project.

Sagittal abdominal diameter; UW-14.

Waist/hip ratio.

HES.

PHnut project.

Serum cholesterol fractions; UW-13, UW-21.

EHRM recommendations.

HES.

PHnut, EHRM projects.

Serum cholesterol total; UW-13, UW-14, UW-18.

Prevalence of total cholesterol > 5 mmol/l. Also: mean/sd of total cholesterol. By gender, age, SES. PHnut project. EHRM project proposes additional 'secondary' indicators.

HES.

WHO. PHnut, EHRM projects.

Waist/hip circumference; UW-14.

Mean and sd.

health examination survey.

PHnut project.

3.1.2   Personal conditions

Personal conditions; this group includes several mental or cognitive personal characteristics for which there is strong evidence that it influences mental or physical health. There is not much experience with these indicators in general monitoring. It is typically a development area.

Awareness of elevated blood pressure or serum cholesterol; UW-13.

By gender, ages 25-74 in 10y age groups, SES.

Survey.

EHRM project.

Knowledge/attitudes on health issues; UW-7, UW-16.

Awareness of lifestyle risks. Eurochip project: awareness of risk from UV radiation. Workhealth project: knowledge/awareness of workplace risks and regulations. By gender, age, region, SES. Oral health project: awareness in mothers of fluoride toothpaste usage.

Interview survey.

Eurochip project, Workhealth project, oral health project.

Optimism; UW-1, UW-17.

% of population exceeding cutpoint of scale, being 'optimist'. Life Orientation Test-revised (LOT-R) 6-item instrument. By gender, age, region, SES.

Interview survey.

Mental health project.

Sense of mastery; UW-1.

% population exceeding cutpoint of scale, satisfactory. 7-point scale of Pearlin et al.

Interview survey.

Mental Health project.

3.2   Health behaviors

This section includes a set of behavioral factors for which a clear-cut association with substantial health problems (physical, mental) has been established. They are also assumed to be susceptible to appropriate health promotion interventions.

3.2.1   Substance use

Alcohol use in children; UW-10, UW-14, UW-21.

% age 15 who were drunk twice or more; by gender, SES, region.

HIS.

CHILD project.

Alcohol use with meals; UW-14.

% used as toxicant/with meals.

HIS.

PHnut project.

Alcohol use: non-drinkers; UW-14.

Prevalence. By gender, age, rgion, SES.

HIS.

WHO. PHnut project.

Amount smoked.

% adults smoking 20 cigarettes/day. Average no. cigarettes/person/year. By gender, age, region,

SES.

HIS.

WHO.

Energy intake from alcohol; UW-14.

% energy intake from alcohol.

HIS, sales statistics.

PHnut project.

Former smokers, never smokers, UW-2, UW-5, UW-13.

Prevalence, by gender, age, SES. EHRM: cigarette and other forms of smoking.

HIS.

EHRM, IMCA projects.

Hazardous alcohol consumption; UW-0, UW-2, UW-5,UW-8, UW-14.

% adolescents, adults consuming > 20 (women), or > 40 g ethanol/day (men); alternatively: > 2 drinks/day (women) or 3-4 drinks/day (men); precise wording and numbers to be adapted to consensus recommendations; data from interview surveys.

HIS.

Eurostat. WHO special programmes. PHnut, IMCA projects.

Pregnant women smoking; UW-0, UW-5, UW-9, UW-21.

% women smoking during 3rd trimester of pregnancy.

Perinatal surveys.

Peristat, IMCA projects.

Regular smokers; UW-0, UW-2, UW-5, UW-7, UW-10, UW-13, UW-22.

% daily cigarette smokers. By gender, age, region, SES. CHILD: children smoking weekly ages 11-13-15. EHRM: also for other smoking than cigarettes. Also Eurostat Sustainable Development Indicator.

HIS

WHO; Eurostat. EHRM, Eurochip, Child, IMCA projects. OECD health care quality project.

Smokers among diabetics; UW-3.

Prevalence.

Diabcare, sentinel networks.

EUDIP project.

Smoking exposure in asthma/COPD patients; UW-5.

% current, past smokers; % women smoking during pregnancy; past/non-smokers with or without ETS (Environmental Tobacco Smoke Exposure).

HIS

IMCA project

Total alcohol consumption; UW-0, UW-2.

Litre pure alcohol/person/year.

Trade and production data (but: illegal production!).

Eurostat; WHO; OECD. ECAS, Efcosum, PHnut projects.

Use of illicit drugs (including children); UW-0, UW-10, UW-21.

Lifetime prevalence for cannabis, cocaïne, amphetamine, ecstasy, other (month/year prevalence to be preferred?). CHILD project: % 15 year-old schoolchildren reporting cannabis last 30 days, heroin/ecstasy ever. By gender, age, region, SES.

HIS. HBSC survey (schools).

EMCDDA; Eurostat. CHILD project.

3.2.2   Nutrition

While under 'substance use' the focus is on negative effects on health, nutrition clearly can influence health both in negative and positive directions. Recommendations from EFCOSUM, DAFNE and Public Health Nutrition projects, Eurodiet taken into account. Many indicators mention 'consumption/availability'. This refers to using either personal surveys (EFCOSUM: intake from for individual survey, 24h recall is first choice) or household budget surveys (DAFNE: conversion from household availability to individual intake; HBS are more widespread than individual surveys but cannot entirely replace these). Some issues still have to be sorted out between the nutrition projects.

Consumption/availability of additional items: eggs, milk (products), pulses, potatoe (products), nuts, juices, added lipids, sugar (products), alcoholic, non-alcoholic beverages; UW-14.

g/person/day. By gender, age, region, SES.

Household budget surveys (Dafne databank).

Dafne project.

Consumption/availability of bread/cereals; UW-14.

g/person/day. By gender, age, region, SES.

FAO. Food consumption surveys, household budget surveys (Dafne databank).

Efcosum, Dafne projects.

Consumption/availability of fish; UW-14, UW-18.

g/person/day; % diets containing < 200 g fatty fish per week. By gender, age, region, SES.

Food consumption surveys, household budget surveys (Dafne databank).

Nutrition projects.

Consumption/availability of fruit excuding juice; UW-0, UW-2, UW-5, UW-14, UW-18.

g/person/day; % population below 100g/day. By gender, age, region, SES.

FAO. food consumption surveys or household budget surveys (Dafne databank).

Eurostat; WHO/FAO; OECD. Nutrition, IMCA projects.

Consumption/availability of meat and meat products; UW-14.

g/person/day; % diets > 80g red meat/day. By gender, age, region, SES.

Food consumption surveys, household budget surveys (Dafne databank).

PHnut, Dafne projects.

Consumption/availability of non-starch polysaccharides; UW-14.

g/person/day; % diets with less than 25g/day of NSP. By gender, age, region, SES.

Food consumption surveys, household budget surveys (Dafne databank).

PHnut project.

Consumption/availability of vegetables excl. potatoes and juice; UW-0, UW-2, UW-5, UW-14, UW-18.

g/person/day; % population below 300g/day. By gender, age, region, SES.

Food consumption survey or household budget survey (Dafne databank).

Eurostat; WHO/FAO; OECD. Nutrition, IMCA projects.

Energy % from protein; UW-14.

WHO: calculated from total protein in food available for consumption.

FAO.

WHO.

Energy % from saturated fatty acids; UW-14.

PHnut project: % population with diet SFA content > 10% energy intake.

Nutrition projects.

Energy % from total fat (lipids); UW-14.

WHO: calculated from total fat in food available for consumption.

FOA.

Nutrition projects.

Frequency of food and drink intake; UW-7.

Frequency of daily intake of food and drink, in people aged 5 to 60 and older.

Survey.

Oral health project.

Intake of contaminants in food; UW-14.

Presence of selected contaminants in selected food items, related to threshold.

Food sample surveys.

Environment/health project.

Intake of vitamin D, folate, iron, iodine, sodium; UW-14.

Measured as biomarkers (see also under biological factors). By gender, age, region, SES.

HES.

Efcosum project.

Meals taken out of home; UW-14.

% meals taken out of home.

Dafne project.

Mineral content of typical diet; UW-14.

Diets with Fe, I, Ca, Se below recommended levels. By gender, age, region, SES.

HES/biomarkers.

PHnut project.

Poly- and mono-unsaturated fatty acid content of typical diet; UW-14.

PHnut project: % population with diet below 7-8% energy from PUFA; % diet with low MUFA.

PHnut, Dafne projects.

Total energy intake; UW-14, UW-18.

Calories/person/day; other?

Food production/trade data

WHO. Nutrition projects.

Vitamin content of typical diet; UW-14.

Diets with vitamin C, D, E, folate, carotenoids below recommended levels. By gender, age, region, SES.

Food consumption surveys or HES/biomarkers.

PHnut project.

3.2.3   Other health-related behaviours

This group includes other behavioral factors, not related to substance use or nutrition, which have been shown to influence serious health problems.

Breastfeeding; UW-0, UW-9, UW-10, UW-14.

WHO: % newborns breastfed at 3 and 6 mnths; Peristat/Nutrition projects: % newborns (exclusively) breastfed first 48 hours and 6 mnths.

HIS. Data from child health services.

WHO. Peristat, PHnutrition, CHILD projects.

Contraceptive use; UW-11.

% of respondents having high-risk sex with condom. % reporting contraceptive use at 1st intercourse age 15-19. % of women 15-49 using any contraceptive at a point in time. By age, region, SES. Condom use is core indicator in UNAIDS.

Surveys.

Eurostat. Reprostat project.

Daily toothbrushing; UW-7

% daily toothbrushing with fluoride toothpaste, ages 3-6, 7-12, 13-19.

Surveys.

Oral health project.

Exposure to UV.

Eurochip project.

Participation in community action/development; UW-17, UW-18.

EUHPID project.

Physical activity; UW-0, UW-2, UW-5, UW-6, UW-10, UW-12, UW-14, UW-18, UW-21.

HIS project: active leisure time activities; work up sweat > 3 days a week. Eupass, PHnut projects: IPAQ questionnaire, under development for use in ages 15-69. CHILD project: % children reporting vigorous activity outside school min. 2h/week, ages 11-13-15. Other instruments in wide use. Evaluation needed. By gender, age, region, SES. Eurostat 18 survey items: low comparability. IMCA project: specific for COPD patients. Pomona project: specific for intellectually disabled.

HIS. CHILD: HBSC survey (schools).

Eurostat. Eupass, PHnut, CHILD, IMCA, Pomona projects.

Sexual behaviour: median age at 1st intercourse; UW-11, UW-21.

% boys/girls with penetrative sex experience age 15-19.

Surveys.

Reprostat project.

Sexual behaviour: partners, frequency; UW-11, UW-21.

Average no. of partners; frequency/week.

Reprostat project.

Traffic behaviour; UW-8.

Seatbelt use? helmet use?

Working party Accidents/Injuries.

3.3   Living and working conditions

This group includes aspects from the outside environment, either physical or social, for which an

association with health problems has been established. The size of the health problem may not be as large as in the previous section, but here we have, in general the case of unvoluntary exposition, which implies the reguirement of a high level of health protection by legal or regulatory measures.

3.3.1   Physical environment

For this group, large lists of environmental health indicators have been developed. Most indicators given are from the core set of environmental health indicators developed by WHO-ECEH (european Centre of Environment and Health), draft of 2000. Here we selected a limited number from this core set, for which the relation with health is relatively direct and substantial. This is not yet updated with the current HMP project on this issue.

Allergen exposure (with asthma); UW-5.

% individuals sensitized and still exposed to dust mites, grass, cats, dogs.

HIS.

IMCA project.

Drinking water quality; UW-15.

Proportion of drinking water samples analysed failing EU standards. Also Eurostat Sustainable Development Indicator.

Survey.

Environment/health project.

Drinking water supply; UW-15.

WHO: % population on piped wtare; total, urban, rural. Environment/health project: Environment/health project: % population with continuous access to adequate amount of safe drinking water in the home.

WHO special programmes. Eurostat.

WHO. Eurostat. Environ-health project.

Environmental tobacco smoke exposure; UW-2, UW-5, UW-10.

Prevalence of population exposed to environmental tobacco smoke. CHILD project: % of children aged 0-4 in smoking household, by SES.

Household surveys.

Eurochip, CHILD, IMCA projects.

Housing conditions; UW-15, UW-18, UW-21.

WHO: no. of persons/room; average living area/person. Environ/health: proportion of households

living in crowded housing conditions: floor area or number of rooms per person, also subjective perception of sufficient space.

UN/ECE. Eurostat.

WHO. Environment/health project.

Housing hygiene; UW-15, UW-21.

% population living in houses missing: water supply, toilet, shower/bath. By SES (income). Partly overlaps with indicators drinking water supply and sewage system.

Eurostat surveys.

Eurostat. Environment/health project.

Indoor dampness and mold growth; UW-15

% population living in damp houses (leaking roof,damp walls etc, rot in wood.

Eurostat surveys.

Eurostat. Environment/health project.

Indoor radon exposure; UW-2.

Eurochip project.

Noise exposure; UW-15.

Population exposed to various noise level ranges per source; i.e. living in dwellings exposed to noise ranges from different sources of environmental noise in urban areas and along major transport infrastructures. Also Eurostat Sustainable Development Indicator.

Acoustical surveys, model calculations.

Environment/health project. European directive 2002/49/EC.

Outside air pollutants; UW-5, UW-15.

WHO: SO2 emissions, kg/person/year. Eviron-health: population distribution of exceedance hours of limits for NO2, SO2 in urban areas; population weighted annual mean of O3, PM2,5. IMCA project: also % asthma/COPD patients living near high traffic density.

Monitoring. Also Eurostat Sustainable Development Indicator.

Environment/health, IMCA projects.

PM10 exposure; UW-0, UW-2, UW-5, UW-10, UW-15, UW-21.

Project Environment/health indicators: Population-weighted annual average ambient concentration of PM10. Eurostat structural indicator Environment: % urban population exposed to concentrations exceeding limit value (50 μg /m3 , 24 h average) on 35 or more days. CHILD

project: % children living in localities with annual mean > 40 ppm of PM10.

Emission registries plus calculations. Also Eurostat Sustainable Development Indicator.

Eurostat. Eurochip, Environment/health, CHILD, IMCA projects.

Recreational water quality; UW-15.

Proportion of identified bathing waters meeting standards for coliform parameters.

Survey.

Environment/health project.

Sewage system; UW-15.

WHO: % population on adequate excreta disposal. % of wastewater adequately treated. Environment/health project: % population served by modern wastewater treatment.

WHO special programmes.

WHO. Environment/health project.

3.3.2   Working conditions

Items are derived from the European Foundation for the Improvement of Living and Working Conditions (Efilwc), and the Workhealth project.

Workplace exposure to inconvenient or damaging working positions; UW-6, UW-16.

Workhealth project inventory: include heavy work, lifting, repetitive work, computer work, use of special equipment.

European Survey of Working Conditions (ESWC).

Workhealth project.

Workplace exposure to mental stress factors; UW-6, UW-16, UW-21.

Workhealth project inventory: include tight working times, working rhythms, job control, responsability patterns, monotony, violence, support, intimidation, etc. As % of employees.

European Survey of Working Conditions (ESWC).

Workhealth project.

Workplace exposure to physical/chemical factors; UW-2, UW-16.

Workhealth project inventory: include air quality, exceedings of exposure limits, electronic/mechanical hazards, climate, radiations. As % of employees exposed.

European Survey of Working Conditions (ESWC).

Workhealth project.

Workplace exposure to tobacco smoke; UW-5, UW-16.

% of employees.

European Survey of Working Conditions (ESWC).

Workhealth, IMCA projects.

Workplace exposure to vibrations, noise; UW-6, UW-16.

% of employees.

European Survey of Working Conditions (ESWC).

Workhealth project.

Workplace-related asthma/COPD risk; UW-5.

% individuals exposed to high asthma/COPD risk occupations; % individuals changing occupation to avoid asthma/COPD risk; % individuals exposed to vapors/gases/fumes at work.

HIS

IMCA project.

Work-related health risks/job quality; UW-0, UW-16, UW-17.

Workhealth project; this cluster includes (1) subjective risk assessments (data European Survey on Working Conditions), (2) physical/psychological working conditions (survey data) and (3) job transitions (survey data). To be further defined.

Surveys.

Workhealth project.

3.3.3 Social & cultural environment

This section includes social factors for which a clear-cut association with health (mental and physical) has been established. In terms of regular monitoring, this is a typical development area.

Children in (social) care; UW-10.

% children in care or formal supervision in social welfare agencies. CHILD project: indicator for social disruption and child vulnerability. By gender, 5y age bands up to 15-17.

Survey (HBSC)

CHILD project.

Crime and perception of crime; UW-15, UW-17, UW-18.

Incidence and perception of theft, robbery and vandalism in dwellings and public spaces. population experiencing violence of specific kinds.

Survey, police reports. ICVS (International Crime Victim Survey)

Environment/health project.

Life events; UW-1, UW-18.

% population with at least one event during last 12 months. 12-item scale of Brugha et al. Mental health project: shortlist of threatening life events. By gender, age, region, SES.

HIS.

Mental health project and Working Party.

Parental support for children; UW-10.

% children easily talking about problems with parents. By gender, age 11, 13, 15, SES. CHILD project: strong association with problem behaviours.

Survey (HBSC)

CHILD project.

Physical punishment in children; UW-10, UW-17.

% children protected by law against physical punishment as % in school or regular families.

CHILD project.

Sexual abuse and violence; UW-11, UW-17.

Experience of sexual abuse and violence.

Not yet operational.

Reprostat project.

Social isolation/participation; UW-1, UW-17, UW-18.

% population exceeding cutpoint. 4-item scale of Statistics Canada. ECHP: contact with neighbours/others, participation in activities, associations. By gender, age, region, SES.

HIS.

Mental health project.

Social support; UW-0, UW-1, UW-17.

% population with poor, moderate, strong social support in a year; Oslo 3-item social support

scale. By gender, age, region, SES.

HIS

Working Party mental health. Recommended by EuroHIS.

4 Health systems

This class should indicators covering activities in prevention and health promotion (4.1) as well as aspects of the health care system (4.2-4.5). It should also cover indicators of the quality of the health system and of 'health system performance'. In the sections on health care services, the categories currently listed by OECD and the System of Health Accounts are largely followed.

In an advanced stage of the development of this list, it was agreed to split this class into two:

* Class 4: Health interventions: health services, and

* Class 5: Health interventions: health promotion.

This new classification could not yet be implemented in the present long list.

4.1 Prevention, health protection and promotion

It was agreed (January 2004) to change this hierarchy, by taking out the 'health promotion part as a separate block. The purpose is to discriminate between health interventions occurring within the health services, including health care and disease prevention (4.1.1, 4.2-4.5) and health interventions outside the health care system (4.1.2, 4.1.3). The latter would go as a separate chapter 5, Called: 'Health Promotion'. This has not yet been implemented in the present version.

4.1.1 Disease prevention

This group includes indicators on the implementation of prevention activities which are or are becoming widely applied, based on broad consensus of their positive effects on health.

Antihypertensive drug treatment; UW-13, UW-22.

Prevalence among actual and potential hypertensives; prevalence in the population; by gender, ages 25-74 by 10y age groups, SES. Also daily aspirin use.

HIS.

EHRM project.

Blood pressure screening; UW-12, UW-13, UW-18, UW-22.

% population with blood pressure measurement in past 5 years. By gender, ages 25-74, 10y age groups, SES. Pomona project: separate for intellectually disabled.

HIS

EHRM, Pomona projects. Also in Social Protection Committee indicators.

Breast cancer screening; UW-0, UW-2, UW-12, UW-18, UW-21, UW-22.

OECD health care quality indicators project: % women 52-69 receiving bilateral mammography

within past year. Pomona project: separate for intellectually disabled.

HIS

Eurostat; OECD. Eurochip, Pomona projects. Also in Social Protection Committee indicators.

Cervical cancer screening; UW-0, UW-2, UW-12, UW-18, UW-21, UW-22.

OECD health care quality indicators project: % women 20-69 receiving cervical cancer screening within past 3 years. Also Eurostat data from HIS. Pomona project: separate for intellectually disabled.

HIS

Eurostat; OECD. Eurochip, Pomona projects. Also in Social Protection Committee indicators.

Cholesterol screening; UW-12, UW-13, UW-18, UW-22.

% population with cholesterol measurement past 5 years. By gender, ages 25-74 in 10y age groups, SES. Pomona project: separate for intellectually disabled.

HIS.

EHRM, Pomona projects. Also in Social Protection Committee indicators.

Colorectal cancer screening; UW-2, UW-18, UW-22.

Coverage.

Survey.

Eurochip project. Also in Social Protection Committee indicators.

Dental health screening; UW-7

Rate (per 1000) of aged 3-16 examined last year for non-symptomatic oral disease.

Registers, surveys.

Oral health project.

Dental services in schools; UW-7.

% of kindergartens and schools with preventive oral health program, including supervised toothbrushing with fluoride toothpaste.

Surveys.

Oral health project.

General preventive examination; UW-12.

Eurostat: 10 items, plus 6 in women. Pomona project: separate for intellectually disabled.

Eurostat. Pomona project.

HIV testing among pregnant women. UW-11.

% pregnant women attending antenatal care who accept HIV screening.

Laboratory records.

Reprostat project.

Hormone replacement therapy (HRT). UW-2, UW-11, UW-13, UW-18.

% women using peri- and postmenopausal hormone medication. By 5y age groups.

HIS.

Reprostat project (not in core set).

Integrated children's health monitoring.

Not recommended in Peristat, Reprostat, CHILD projects.

Lipid lowering drug treatment; UW-13; UW-22.

Prevalence in the population. By gender. ages 25-74 by 10y age groups, SES.

HIS.

EHRM project.

Medical examinations in work environment; UW-16.

To be developed.

Workhealth project.

Neonatal screening.

By age of mother.PKU, other.

Not recommended by peristat project.

Osteoporosis prevention drug treatment. UW-6, UW-18, UW-22.

Defined daily doses (ATC M 05 B).

Sale statistics, prescriptions.

Musculoskeletal conditions project.

Prenatal care attendance; UW-7, UW-9, UW-22.

Distribution of timing of first antenatal visit by trimester of pregnancy, for all women delivering live or stillbirth. Oral health project: % women with dental care visit during pregnancy.

Peristat project, oral health project.

Prenatal screening.

By age of mother.

Not recommended by Peristat.

Protective sealants; UW-7.

% children aged 6-8 and adolescents aged 12-14 with dental sealants.

Surveys

Oral health project.

Smoking counseling; UW-5, UW-7, UW-22.

IMCA project: % smokers which have been offered a stop-smoking programme. Same for asthma/COPD patients, with % compliance and effect. Oral health project: % dentists advising on smoking cessation.

HIS.

EHRM, IMCA, Oral health projects.

Testing for prevention of diabetes complications. UW-3, UW-18, UW-22.

% diabetics tested for: HbA1c last 12 months; lipid profile last 12 months; micralbuminuria; blood pressure last 12 months; retina fundus inspection last 12 months; serum creatinine last 12 months. OECD health care quality: include retinal exams and HbA1c testing last year.

Diabcare, sentinel networks, patient registries.

EUDIP project. OECD health care quality project.

Vaccination coverage in children; UW-0, UW-10, UW-22.

WHO: % children immunized for diphtheria, pertussis, poliomyelitis, tetanus, HiB, hepatitis B, measles, mumps, rubella, meningococcus C. OECD health care quality: % children fully immunized at age 2 for MS basic vaccination program. By region, SES.

Register.

WHO; OECD. CHILD project.

Vaccination coverage influenza; UW-5, UW-18, UW-22.

% population covered, by age, region, SES. IMCA project: % COPD patients (stage 0) with

influenza vaccination.

HIS

OECD. IMCA project. OECD health care quality project. Also in Social Protection Committee indicators.

Vaccination in intellectually disabled; UW-12.

Pomona project: vaccination of adults for tetanus, influenza, hepatitis B.

Pomona project.

4.1.2 Health promotion

This group includes indicators on the formulation and implementation of health promotion interventions, largely aimed at improving health behaviours. Selected indicators should be clearly related with the effectiveness of the interventions. This is clearly a development area. The EUHPID project will recommend indicators in this and related sections, based on a broad perspective of health promotion. See note under heading of 'Prevention, health protection and health promotion' for agreement on rearrangement of groups.

Anti-bullying policies in schools; UW-10.

% of children in schools with written anti-bullying policies.

Mixed sources.

CHILD project.

Health promotion funding; UW-17.

Funding sources at national, regional local levels; guidelines relating funding to actual needs; actual expenditures.

EUHPID project.

Health promotion in schools; UW-17.

EUHPID project: existence of health promotion teams; teacher's attitudes; pupil's commitment to school; hygienic and food conditions; safe school environment.

EUHPID project.

Health promotion in the workplace; UW-16, UW-17.

Workhealth project inventory: programmes, training, reintegration, participation, etc. To be developed.

Workhealth project.

Health promotion policy evaluation; UW-17.

EUHPID project: existence of routine policy evaluation.

EUHPID project.

Health promotion policy formulation; UW-17.

EUHPID project: involvement in policy formulation of: organisations/actors, social determinants, behaviours, broader socio-economic context.

EUHPID project.

Health promotion policy implementation; UW-17.

EUHPID project: involvement of bodies/organisations at national, regional, local levels in funding and implementation.

EUHPID project.

Health promotion work force and training; UW-17.

Availability of health promotion professional education at various levels.

EUHPID project.

Integrated programmes in settings: e.g. schools, workplaces; UW-0, UW-17.

More specific indicators given in this section, and under 'working conditions' for the workplace setting. To be further developed.

EUHPID health promotion project; Workhealth project.

Nutritional fortification. UW-14.

Monitoring of practices such as fortification of salt with iodine, cereals with iron.

PHNut project.

Parenting skills support; UW-1.

Projects, programmes to support parenting skills.

For development.

Working party mental health.

Physical punishment in children; UW-10, UW-17.

% children protected by law against physical punishment as % in school or regular families.

CHILD project.

Policies and practices on healthy lifestyles; UW-0, UW-1, UW-8, UW-17, UW-21.

Includes policies and practices on smoking, alcohol, safe sex, drug use, sunlight exposure, physical activity, injury and suicide prevention. EUHPID project: existence of policy documents at national, regional and local levels. More specific indicators are also listed in this section. To be further developed.

EUHPID health promotion, mental health projects.

Policies on healthy nutrition; UW-0, UW-14, UW-17.

Nutritional policies and statutory legislation. EUHPID project: existence of policy documents at national, regional and local levels. More specific indicators are also listed in this section. To be further developed.

WHO-Europe (special study, 2003). PHNut, EUHPID projects.

4.1.3   Health protection

This group includes indicators on the implementation of legislation and regulation, aimed at prevention at the population level. Much of this regulation is being developed at the EU level. From a vast array of possibilities, a few issues have been selected that are associated with substantial health effects and that have been documented as (cost-) effective. This is also the area of 'health in other policies' and 'health impact assessment' (HIA). On the environmental health side, the Environment/health project will give recommendations.

Policies on chemical emergencies; UW-15.

Regulatory requirements for land-use around chemical sites; presence of a national register of chemical incidents; government preparedness for chemical incidents.

Information on regulations.

Environment/health project.

Policies to reduce ETS (environmental tobacco smoke) exposures; UW-0, UW-2, UW-5, UW-10, UW-15, UW-17.

Project Environment/health indicators: Definition of composite index, on smoking restrictions in 9 public domains and on advertisement. Eurostat: information on smoking ban in public places. other sources? CHILD project: include pregnancy, schools, day-care, public places, transport, hospitals, theatres, museums, restaurants, specifically for children.

Information on regulations/laws.

Environment and health, CHILD, IMCA projects.

Policies to reduce leisure noise exposure; UW-15.

Composite index of noise abatement measures leisure activities involving high music levels. Six variables: maximum sound levels in bars etc, insulation regulations for bars etc, regulations for

music appliances, legislation for open-air events, for music concerts, local dealing with noise complaints.

Legislation information.

Environment/health project.

Radiation monitoring; UW-15.

Existence of an effective monitoring of environmental radioactivity.

Environment/health project

Regulations on air/water quality.

Environmen/health project.

Regulations on alcohol and driving.

Allowed limit of alcohol level in blood.

Regulations on food safety/quality.

Environment/health project.

Regulations on lead exposure; UW-10.

Existence of regulations limiting the use of lead in building etc. materials and establishing biomonitoring (composite index proposed).

CHILD project.

Regulations on noise; UW-10.

Existence of policies/regulations for reducing noise exposure. CHILD project: composite index proposed for children: intensive care units, day-care centres, schools, kindergartens.

Environmental agencies.

Environment/health project. CHILD project.

Regulations on occupational safety and health; UW-16.

Workhealth project inventory: presence, compliance, etc. To be developed.

Workhealth project.

Regulations on safe transport of children; UW-10.

CHILD project.

Regulations on seat belts, cycle helmets.

Existence and enforcement of regulation. CHILD project: also for safe transport of children (composite index proposed: safety seats in cars, belts, helmets, speed limits, safe walking/cycling plans).

Various sources.

CHILD project.

Smoking advertisment restrictions; UW-2.

Existence/enforcement of laws/regulations to inhibit tobacco advertisement.

CHILD project; Environment/health project.

Tobacco prices.

4.2 Health care resources

In this section, OECD and HFA listings have been largely followed.

4.2.1 Facilities

Hospital beds; UW-0, UW-1, UW-18.

total/acute care/psychiatric care/nursing elderly home care; Eurostat, WHO: number per 100,000 population. OECD: number per 1000 population. By region.

Registers

Eurostat; WHO; OECD. Mental Health project. Also in Social Protection Committee indicators.

Pneumology and allergy units.

No. per 100.000 population (adults, children).

Registries.

IMCA project.

Primary Health Care Centres; UW-5.

No of primary health care centres; % of these with facilities for asthmatic children, sprirometry, COPD education.

Survey.

IMCA project. Also in Social Protection Committee indicators.

Stroke units; UW-4, UW-18, UW-22.

Eurociss project.

4.2.2   Manpower

Indicators in this group recommended by the manpower project, with aid of the Eucomp project. Main goal of manpower indicators in ECHI frame: cost element and quality of care. Other aims: role in production/income/economic growth. Bottom group of indicators indicated by Manpower project as of lower priority. ECHI suggestion: some measure of personnel shortage may be more appropriate than unemployment from the point of view of quality of care or health system performance.

Ambulatory care employment.

Total employment in offices of: physicians, dentists, paramedical practitioners, out-patient care centres, medical/diagnostic laboratories, home health care, other ambulatory care. Persons, fte per 1,000, by gender.

National register, hospital statistics.

Manpower project.

Clinical psychologists; UW-1.

Number per 100,000.

Registers.

Mental health project.

Dentists employed; UW-7.

Eurostat: practising and licensed dentists per 100,000. OECD: practising dentist per 1,000 and as % of total health employment. WHO: also fte. By region. Oral health project: number and rates per 100,000 population of active dentists, dental hygienists, oral health therapists, clinical dental technicians. % Of population with access to dentist within convenient distance.

Registers.

Eurostat, OECD, WHO. Manpower project: no priority. Oral health project.

Emergency services availability.

EED project: Unit hours = No. of professionally staffed hours for emergency services (Basic Life Support + Emergency Life Support + Advanced Life Support), in a year, per 100,000 population. Also per km2.

Data source: Deployment plan.

Emergency Services project.

Employment in general health administration.

Government administration of health, social security funds, other (social/private) insurance, other prividers of health administration. Persons, fte per 1,000, by gender.

National registers.

Manpower project.

Employment in provision and administration of public health programmes.

Persons, fte per 1,000, by gender.

National register.

Manpower project.

Employment in retail sale and other providers of medical goods.

Total employment in dispensing chemists, retail sale and other suppliers of optical glasses, hearing aids, other medical appliances, other sale of pharmaceuticals and medical goods. Persons, fte per 1,000, by gender.

National register, hospital statistics.

Manpower project.

Health services employment.

No. of persons, fte, per 1,000 population, by gender. Also % of total employment. OECD: 'total health employment'.

National register, hospital statistics.

OECD. Manpower project.

Hospital staff ratio: acute care.

Hospital staff/number of beds. Hospital staff as indicated under 'hospital employment'.

National registers, hospital statistics.

OECD. Manpower project.

Hospitals employment.

Total employment in general hospitals, mental health and substance abuse hospitals, other specialty hospitals. Persons, fte per 1,000, by gender. Also as % of total and total health employment.

National register, hospital statistics.

OECD. Manpower project.

Midwives employed.

Eurostat, number per 100,000. WHO: also fte. By region.

Registers.

WHO. Manpower project: no priority.

Mobility of professionals; UW-0.

To be developed

Working party on health systems.

Nurses employed; UW-0, UW-22.

Eurostat: practising nurses/midwives, qualified nurses per 100,000 (recent study on improvement). WHO: practising nurses and fte per 100,000. OECD: practising nurses per 1000, also as % of total health employment). By region. WHO: also proportion of nurses working in hospitals.

Registers, hospital statistics. Eurostat works on improvement of database.

Eurostat; WHO; OECD. Manpower project: no priority. Also in Social Protection Committee indicators.

Nurses staff ratio: acute care.

Hospital nurses staff/number of beds. Hospital staff as indicated under 'hospital employment'.

National registers, hospital statistics.

OECD. Manpower project.

Nursing and residential care facilities employement; UW-18.

Total employment in facilities for nursing care, residential mental retardation, mental health & substance abuse, elderly community care, other residential care. Persons, fte per 1,000, by gender.

National register, hospital statistics.

Manpower project.

Paramedical professions.

Eurostat: No. of physiotherapists per 100,000. By region.

Registers.

Manpower project: no priority.

Personnel in occupational safety and health; UW-16.

Workhealth project inventory: doctors, safety specialists, inspectors, etc. To be developed.

Workhealth project.

Pharmacists employed.

Eurostat, WHO: practising pharmacists per 100,000. OECD: per 1,000, also as % of total health employment. By region.

Registers.

Eurostat, OECD, WHO. Manpower project: no priority.

Physicians by specialty; UW-1, UW-5

Eurostat: 23 specialties, numbers per 100,000. OECD: GP's, specialists per 1,000, also as % of total health employment. Mental health project: include psychiatrists, child psychiatrists. IMCA project: include GP's, pneumologists, pediatricians, allergy specialists, asthma/COPD-specialized nurses.

Registers.

Eurostat, OECD. Mental health, IMCA projects. Also in Social Protection Committee indicators.

Physicians employed; UW-0, UW-22.

Eurostat: practising and licensed physicians per 100,000. WHO: practising physicians and fte per 100,000. OECD: practising physicians and fte per 1000, also as fraction female physicians. By region. WHO: also proportion of physicians working in hospitals.

Registers, hospital statistics.

Eurostat, WHO, OECD. Manpower project: no priority.

Satisfaction of dentists; UW-7.

Satisfaction of dentists with the quality of care: preventive, curative, orthodontic, remuneration (i.e. not satisfaction of patients).

Surveys

Oral health project.

Shortage of medical personnel.

For development.

Unemployment in medical personnel.

Labour market statistics.

4.2.3   Education

Dentists graduated; UW-7.

Number per 100,000 per year. By gender, region.

Registers.

Oral health project.

Nurses/midwives graduated.

Number per 100,000 per year. By gender, region.

Registers.

Pharmacists graduated.

Number per 100,000 per year. By gender, region.

Registers.

Physicians graduated; UW-22.

Number per 100,000 per year. By gender, region.

Registers.

Physician's training for intellectual disabilities; UW-12.

Pomona project.

4.2.4   Technology

Diffusion of new technology is also a measure of health system perfromance; indicators to be selected.

CT scans; UW-0, UW-2, UW-22.

No. of units per million population.

Hospital statistics.

OECD.

Haemodialysis stations.

No. of units per 100,000 population.

OECD.

Linear accelerators.

No. of units with at least 2 accelerators.

Hospital statistics.

Lithotriptors.

No. of units per million population.

OECD.

Mammographs.

No. of units per 100,000 population.

OECD.

MRI units; UW-0, UW-2, UW-22.

Number of units per million population (OECD).

Hospital statistics.

Eurostat; OECD.

PET units; UW-2, UW-22.

No. of units per million population (Positron Emission Tomography)

Radiation equipment; UW-2.

No. of units.

Eurostat, OECD. Eurochip project.

4.3   Health care utilisation

in this section, WHO-Europe has been followed (except admissions), with extensions from OECD: hospital discharges and medicine use. Discharges are taken as the best indicator for disease-specific hospital use, from the population health viewpoint. If discharges and medical procedures are further specified, we recommend to use ICD or –related codes, to comply with the health status indicators.

4.3.1   In-patient care utilisation

Average length of stay, limited diagnoses; UW-0, UW-4, UW-5, UW-22.

Days, per diagnosis; include diagnoses covered in Eurostat 65 causes of death and the selected causes of morbidity. Eurociss project: include AMI, acute coronary syndromes, other heart

disease, stroke. IMCA project: include asthma, COPD.

Hospital statistics.

Eurostat; WHO; OECD. Hospital data, Eurociss, IMCA projects.

Beddays acute care.

Beddays per 100,000 population. Hospital data project: optionally by selected diagnoses. Eurociss project: for AMI, acute coronary syndromes, stroke. By region.

Hospital data.

OECD. Hospital data project, Eurociss project. Also in Social Protection Committee indicators.

Hospital admissions asthma/COPD; UW-5

% individuals with COPD admitted to emergency room; to hospital, to intensive care unit, during last year. Hospital admissions (including emergency room) of asthma patients by appropriateness of diagnosis and of treatment compliance.

Hospital data.

IMCA project.

Hospital in-patient discharges, limited diagnoses; UW-0, UW-4, UW-8, UW-18, UW-22.

OECD: Number per 100,000 population, per diagnosis. Hospital Data project made shortlist of some 130 diagnoses/external causes and 18 procedures. These include almost all of the 65 Eurostat COD and most of the diseases under morbidity in the ECHI list. Eurociss project: include AMI, acute coronary syndromes, all ischaemic heart disease, heart failure, other heart disease, stroke. By region. By SES?

Hospital statistics.

Eurostat; WHO; OECD. Hospital data project. Eurociss project.

Hospitalisation of intellectually disabled; UW-12.

Pomona project: admission rates, length of stay.

Pomona project.

Hospitalisations in psychiatric services; UW-1.

Full-time and part-time hospitalisations in psychiatric services; separate under age 18. By region.

Hospital data.

Mental health project.

Long-stay psychiatric patients; UW-1.

WHO: No. of in-patients staying > 1 year in psychiatric services. Mental health project: same, > 300 days.

Hospital data.

WHO. Mental health project.

Occupancy rate, acute care; UW-22.

% of acute care beds occupied.

Hospital data.

OECD.

Place of birth; UW-9.

Distribution of place of birth: at home, maternity units (by size, i.e. annual no. of births).

Peristat project.

4.3.2 Out-patient care utilisation

Daycase-discharge ratio, limited diagnoses; UW-0, UW-22.

Ratio od daycases and in-patient discharges, per diagnosis. Hospital Data project made shortlist of some 130 diagnoses/external causes and 18 procedures. These include almost all of the 65 Eurostat COD and most of the diseases under morbidity in the ECHI list.

Hospital statistics.

Eurostat; WHO; OECD. Hospital data project.

Dentist contacts; UW-0, UW-7.

Number of contacts per capita per year. By gender, age, SES, region. Oral health project: also reason for contact.

HIS.

Eurostat, OECD. Oral health project. Also in Social Protection Committee indicators.

Emergency services by diagnosis; UW-4, UW-18.

EED project: No. of incidents of the 'first hour quintet', i.e. cardiac arest, severe truma, severe breathing difficulties, cardiac chest pain, stroke; also per 100,000 population, as % of all high priority EMS service responses. Same for trauma patients by GSC (Glasgow Coma Score).

Database of the EMS dispatch center.

Emergency Services project.

Emergency services high priority.

EED project: Annual number of EMS responses for perceived life-threatening situations, leading to patient contact per 100,000 population; separate for treatment and transport; separate with recognition of death; also per km2.

Deployment plan, database of the EMS dispatch center.

Emergency Services project.

Emergency services utilisation.

EED project: EMS responses by unit hours, for various types of services. Also: no. of EMS calls per year per 100,000 population, per km2.

Deployment plan, database of the EMS dispatch center.

Emergency Services project.

General practitioner utilisation; UW-0, UW-22.

Number of contacts per capita per year. Needed: context of primary care delivery. By gender, age, SES, region.

HIS.

Eurostat. Also in Social Protection Committee indicators.

Hospital daycases, limited diagnoses; UW-0.

SHA definition of daycase: formal admission and discharge on the same day. OECD: Number per 100,000 population, per diagnosis. Hospital Data project made shortlist of some 130 diagnoses/external causes and 18 procedures. These include almost all of the 65 Eurostat COD and most of the diseases under morbidity in the ECHI shortlist.

Hospital statistics.

Eurostat; WHO; OECD. Hospital data project.

Medical specialist contacts; UW-0.

Number of contacts per capita per year. Needed: context of primary/specialist care delivery. By gender, age, SES, region. OECD: Doctor's consultations total.

HIS.

Eurostat. Also in Social Protection Committee indicators.

Occupational safety and health services use; UW-16.

Workhealth project inventory: doctors, safety specialists, inspectors, etc. To be developed.

Workhealth project.

Orthodontic treatment; UW-7.

% children, adolescents aged 5-18 with orthodontic appliance.

Surveys.

Oral health project.

Outpatient care to intellectually disabled; UW-12.

Pomona project: GP, specialists.

Pomona project.

Outpatient visits COPD; UW-5

% individuals with COPD having primary care visit, specialist visit, rehabilitation session during last year.

Registries

IMCA project.

Outpatient visits other; UW-0, UW-1, UW-18.

Number of contacts per capita per year, for: physiotherapist, alternative practice, maternal/child care, mental health care. Eurostat and OECD survey questions include minimally GP's, dentists and medical specialists. It is useful to have more (para)medical branches included. The Mental Health project has run a pilot survey to comprehensively cover ambulatory mental health care (public and total psychiatric outpatient care, seeing health professional).

HIS.

Eurostat. Mental health Working Party.

Patient mobility; UW-0.

To be developed

Working Party on health systems.

4.3.3   Surgical operations and procedures

The selection below is a limited subset from OECD. Indicators should be representative for technical progress, regional medical habits or performance of health care; make here new arrangement based on classification of procedures

Births by mode of delivery; UW-9.

OECD, WHO: Caesarean sections per 1000 live births. Peristat project: distribution of births by mode of delivery: % spontaneous, assisted (ventouse, forceps), Caesarean before labour onset, Caesarean during labour. Specify by presentation of fetus, parity, previous Caesarean, plurality; indicator of medicalisation of childbirth (also quality indicator?)

Birth registers, perinatal surveys.

OECD, WHO. Peristat project.

Births without medical intervention; births attended by midwives; UW-9.

Percent.

Peristat project.

CABG (Coronary Artery Bypass Grafting); UW-4, UW-18.

No. per 100,000. Also per acute AMI, acute coronary syndrome. Emergency CABG (within 24 hours from onset). 30-day case-fatality after CABG.

Hospital data.

OECD. Eurociss project.

Cancer palliative therapy; UW-2, UW-18.

Eurochip project.

Cancer treatments; UW-2.

Eurochip: Patients treated by surgery, chemotherapy, radiotherapy, endocrine therapy, bone marrow transplants (ref. to cancer type).

Hospital data, cancer registries?

Eurochip project.

Cardiovascular operations other, UW-4.

Eurociss project: pacemakers, CT, MRI scans for stroke, valvular operations, aortic and other aneurysms. Rate per event, by hospital discharges, acute versus elective.

Hospital data.

OECD. Eurociss project.

Cataract operation; UW-0, UW-18, UW-22.

Number of procedures per 100,000 per year.

Hospital data.

OECD. Hospital data project.

Deliveries after ART (assisted reproductive technology); UW-11.

% women delivering live or stillborn after ART (range of techniques). By age. Rprostat project not in core set.

Birth and ART registers linked.

Reprostat project.

Episiotomy; UW-9.

% vaginal births with episiotomy.

Peristat project.

Fertility treatment; UW-9.

% pregnancies following fertility treatment.

Peristat project.

Heart transplant.

No. per 100,000. Eurociss project: Indirect indicator for heart failure.

Hospital data.

OECD. Eurociss project.

Hip replacement; UW-0, UW-6, UW-18, UW-22.

Number of procedures per 100,000 per year.

Hospital data.

OECD. Hospital data project. Musculoskeletal disorder project.

Hysterectomy; UW-11, UW-18.

% women with hysterectomy at age 50.

Hospital data, population survey.

OECD. Reprostat project.

Knee replacement; UW-6, UW-18.

No. per 1,000.

Hospital data.

OECD. Musculoskeletal disorder project.

Laser treatment in diabetics retinopathy; UW-3; UW-18.

% patients receiving laser treatment < 3 months after diagnosis.

Patients registries.

EUDIP project.

Onset of labour; UW-9.

Distribution of births by onset of labour.

Peristat project.

PTCA surgery (Percutaneous Transluminal Coronary Angioplasty); UW-0, UW-4, UW-18, UW-22.

Number of procedures per 100,000 per year. Also per acute AMI. Emergency PTCA (within 24 hours from onset).

hospital data.

OECD. Hospital data project, Eurociss project.

Renal replacement in diabetics; UW-3, UW-18.

Annual incidence and prevalence of dialysis and transplantation per million population.

Patient registries.

EUDIP project.

Surgical daycases.

Number per 1,000. Invasive surgery public + private; excludes accident emergency surgery and endoscopies. Also as % of total surgical procedures.

Hospital data.

OECD.

Surgical in-patients.

Number per 1,000. Invasive surgery public + private; excludes accident emergency surgery and endoscopies.

Hospital data.

OECD.

4.3.4 Medicine use/medical aids

Medicine use, selected items; UW-0, UW-1, UW-4, UW-5, UW-6, UW-12, UW-18, UW-22.

Euro-med-stat project: Utilisation in DDD/1000 population/day; OECD/Eurostat: sales in mln USD; for the main ATC groups. OECD: Antacids, peptic ulcer drugs, diabetes drugs, cholesterol/triglyceride reducers, cardiac glycosides, anti-arrhythmics, antihypertensives, diuretics, beta blocking agents, renin-angiotensin agents, sex hormones, systemic antibacterials, anti-inflammatory & antorheumatics non-steroids, analgesics, anxiolytics, hypnotics/sedatives, antidepressants, drugs for obstructive airway diseases. WP mental health: also antipsychotics. Eurociss project: also thrombolityc drugs, ACE-inhibitors, nitrates, aspirin, calcium antagonists, digitalis, spironolattone, anticoagulants. Musculoskeletal disorder project: also RA drugs. IMCA project: include beta-agonists, steroids, oxigenotherapy in COPD patients; beta-agonists, glucocorticosteroids, theophylline, leukotriene modifier in asthma patients. If possible by gender, age, region, SES. Pomona project: psychotropic drugs in intellectually disabled.

OECD. Eurostat: IMS drug monitor.

OECD; Eurostat. Euro-med-stat, Eurociss, IMCA, musculoskeletal disorder, Pomona   projects; Working Party mental health. Also in Social Protection Committee indicators.

Use of medical aids; UW-18.

To be defined.

HIS.

4.4 Health expenditure and financing

In this section the core list of OECD is mostly used. Note: the mental health project proposes psychiatric share in disability pensions and sickness compensation; this raises the question where to accomodate this type of information.

4.4.1 Health care system

Distribution of household expenditures on health.

To be defined. Take definitions from SPC indicators?

Insurance coverage; UW-0, UW-18, UW-22.

OECD: % population covered for total health care, in-patient care, out-patient care, pharmaceuticals. Meant as proxy for equity of access; useful?

Registers.

OECD. Also in Social Protection Committee indicators.

Structure of national health system.

Key item(s) characterising the system. To be developed.

4.4.2 National expenditure on health

Expenditure on personal health care.

Total/public/private expenditures, as total sum, USD PPP per capita, % of GDP.

Health accounts.

OECD.

Expenditures on collective health care.

Total/public/private expenditures, as total sum, USD PPP per capita, % of GDP.

Health accounts.

OECD.

Total/public/ private expenditures on health; UW-0, UW-22.

Total/public/private expenditures, as total sum, USD PPP per capita, % of GDP.

health accounts/national accounts.

OECD, under SHA. Also Eurostat Sustainable Development Indicator. Also in Social Protection Committee indicators.

4.4.3 Expenditure on medical services

Expenditure on home care; UW-18.

% of total health expenditures.

Health accounts.

OECD.

Expenditure on in-patient care.

% of total health expenditure.

Health accounts.

OECD.

Expenditure on out-patient care.

% of total health expenditure.

Health accounts.

OECD.

Expenditures on ancillary services.

% of total expenditures on health.

Health accounts.

OECD.

4.4.4   Medical goods dispensed to outpatients

Expenditure on pharmaceutical goods and other medical non-durables.

Total/public/private expenditures, as total sum, USD PPP per capita, % of total health expenditures.

Health accounts.

OECD.

Expenditures on medical appliances/other durables.

Total/public/private expenditures, as total sum, USD PPP per capita, % of total health expenditures.

Health accounts.

OECD.

4.4.5   Total health expenditure by age group

Expenditure by age group, UW-18, UW-22.

% expenditures ages 0-64, 65-74, 75+, by gender.

Calculate from several sources.

Expenditure by disease group; UW-1, UW-2, UW-5, UW-7.

Mental health project: expenditures of in-patient + outpatient psychiatric services. Eurochip project: public/private expenditures for tobacco prevention, cancer registration, cancer screening, cancer research, cancer drugs. IMCA project: cost of asthma and COPD hospitalisations, out-patient care, emergency room visists, follow-up visits. Oral health project: total cost (public + private) oral health services per year, also as % of GNP (PPP).

Mental health, Eurochip, IMCA, oral health projects.

Expenditures on occupational health and safety; UW-16.

To be developed.

Workhealth project.

4.4.6 Health expenditure by fund source

Expenditures by fund source; UW-5.

% of total health expenditures, for: public expenditures on health, general government (excluding social security), social security schemes, private expenditures on health, out-of-pocket payments, private insurance, private insurance (other than social insurance), private social insurance, all other.

Health accounts & other sources.

OECD. IMCA project. Also in Social Protection Committee indicators.

Financial equity/access indicator.

Define, derive from MDS/SHA or SPC indicators?

4.5 Health care quality/performance

This is a special section. Whereas the sections on resources, utilisation and expenditures rather contain 'neutral' statistical indicators on capacities, uses and cost of the system, quality and performance deal with whether the system does what we want it do do. The yardstick is thus whether it is patient-oriented, safe, and last but not least effective in promoting health. In fact selected indicators from earlier sections like on medical manpower, on up-to-date technology, on specific medical procedures, or on financial equity of access could find a place in this section as well. Together with this section, many of the indicators under 'prevention etc.' would make up a range of indicators of the quality/performance of health systems, including health care, prevention and health promotion. Items are included from the OECD project on health care quality indicators.

4.5.1 Subjective indicators

This group includes indicators on patient-orientedness.

Responsiveness of the health system; UW-22.

WHO instrument contains items on defined experiences concerning access, timeliness, etc. Adopt or adapt?

Survey.

WHO. Also in Social Protection Committee indicators.

Satisfaction of mothers with perinatal care; UW-9, UW-22.

For development.

Peristat project.

Satisfaction with the health care system; UW-22.

% population satisfied.

Survey.

Eurostat. Also in Social Protection Committee indicators.

4.5.2 Health care process indicators

This group includes indicators of medical safety as well as effectiveness, in terms of process measures. Selected items should be clearly associated with adverse or improved health outcomes from research information.

28-day emergency re-admission rate; UW-22.

To be developed.

Hospital data.

Examples from UK.

Access of care for children; UW-10, UW-22.

Does health policy give access to immunisation and other care for children who are asylum seekers, illegal, homeless, itinerant.

Policy assessment.

CHILD project.

Asthma/COPD maintenance; UW-5, UW-18.

COPD: % population participating in COPD education programme; having lung function measurement. Asthma: % population with wheeze or asthma diagnosis having asthma management plan; having peak flow meter at home; having lung function measurement; having allergy test. Yearly basis.

Survey.

IMCA project.

Compliance with good oncology practice; UW-2, UW-22.

Deviance from best oncology practice: % of treatments given with specified bad practice.

Cancer registry.

Eurochip project.

Delay of cancer treatment (UW-0?), UW-2, UW-22.

Time between diagnosis and first treatment. By site.

Cancer registries.

Eurochip project.

Diabetes monitoring (UW-0?); UW-3.

Proportion of diabetics with HbA1c < 6.5% (or other cut-point?).

HES.

OECD health care quality indicators. Eudip project.

Emergency services response time.

EED project: Time between ambulance departure and arrival on scene: percentage of response intervals under 8 minutes; 90% percentile of response intervals. Additional indicators: time interval EMS on scene; time from departure at scene to arrival in hospital; time to first defibrillatory shock.

Database of the EMS dispatch center.

Emergency Services project.

Emergency services: advanced interventions.

EED project: No. of ALS interventions (Advanced Life Support) by the EMS services, i.e. assisted ventilation, intubation, i.v. drug administration; also 100,000 population.

Database of the EMS dispatch center.

Emergency Services project.

Equity of access; UW-0, UW-22.

This item is kept separate from 'insurance coverage' (section (1)). Can an operationalisation be taken from OECD studies, or from work by the Social Protection Committee? Eurostat SILC: Unmet needs for medical examination or dental examination/treatment, and the reasons for that.

EU-SILC survey.

Also in Social Protection Committee indicators.

Femur fractures waiting time.

Percentage femur fractures operated within 48 hours.

Hospital data.

OECD health care quality project.

Health promotion in hospitals; UW-17.

EUHPID project: percent patients educated in health promotion; leisure opportunities in hospitals; awareness of staff towards health promotion; budget allocated for health promotion activities.

EUHPID project.

Parental accompaniment in hospitals; UW-10, UW-22.

% of children inpatient beds (under 16) where parents can stay day and night

Hospital data?

CHILD project.

Quality of blood products.

Operationalisation?

Retinal exams in diabetics (UW-0??)

Stage at cancer diagnosis; (UW-0?), UW-2.

see Eurochip project.

Hospital data.

Eurochip project.

Support to women in the perinatal period; UW-9, UW-22.

For development.

Peristat project.

Very preterm births outside NICU.

% Very preterm births in units without NICU.

Birth registries.

Peristat project.

Waiting times; UW-0, UW-18, UW-22.

Average waiting time, for elective surgeries: PTCA, hip replacement, cataract operation

hospital data.

OECD studies. Also in Social Protection Committee indicators.

4.5.3　　　Health outcomes

This group includes indicators of medical safety as well as effectiveness, in terms of measures health outcomes. Selected items should be clearly related to the use of up-to-date medical procedures.

30-day mortality rate following AMI; UW-22.

OECD health care quality project.

30-day mortality rate following CABG; UW-4, UW-22.

Eurociss project.

30-day mortality rate following stroke; UW-22.

OECD health care quality project.

Antibiotic resistance; UW-22.

% samples showing resistance. Focus on Staphylococcus aureus (MRSA) and Streptococcus pneumoniae.

Laboratory tests. Also Eurostat Sustainable Development Indicator.

EARSS project.

Avoidable deaths; UW-22.

OECD health care quality: asthma mortality rate age 5-40. Also according to list of Nolte & McKee.

Mortality statistics.

OECD. Nolte & McKee, BMJ vol. 327 (2003) 1129-1133.

Cancer survival rates: breast, cervix, colorectal; UW-0, UW-2, UW-22.

OECD: 5-year observed and relative survival rates for breast, cervical, colorectal cancer. CHILD project: 5y survival rate acute lymphatic leukemia in children, by age.

Hospital data, cancer registers.

OECD health care quality project. Eurochip project. CHILD project.

Coverage of cancer registration; UW-2.

Eurochip project.

Decubitus in nursing and elderly homes, UW-18, UW-22.

Prevalence.

Registers.

Iatrogenic disease/death, UW-18, UW-22.

For development.

Major amputations in diabetics (UW-0??); UW-22.

Percent of diabetic patients aged 18-75 with major amputations (above or below knee) in a given year.

OECD health care quality project.

Renal failure in diabetics; UW-3, UW-22.

Incidence of end-stage renal failure per 1,000 diabetics.

EUDIP project. OECD health care quality project.

Surgical wound infection; UW-0, UW-22.

WHO: % of all operations.

hospital data.

WHO; OECD health care quality indicators.