the EURO-URHISproject

Euro-Urhis

Final Report



Content EURO-URHIS FINAL REPORT

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Introduction

This interim technical implementation report describes the work carried out and all the results obtained during the project. We report the results obtained to date and an indication of any deviation from the initial work programme set out in annex I to the grant agreement that has occurred.

Part II provides a comparison between the expenditure incurred during the first period and the foreseen budget stated in annex II of the grant agreement.

We describe the deliverables achieved, and present final versions of the WPs completed during the project.

Executive Summary

1. General

The General objectives of the project were to develop a comprehensive urban health information and knowledge system to:

- 1. Help to identify and prioritise urban health problems
- 1. Enable the monitoring of the effects of actions taken to address them
- 1. Ensure timely access to information
- 1. Contribute in building advocacy, communication and education strategies
- 1. Use standardized methodology for data collection, processing and dissemination, allowing transnational comparisons and time trend analysis

The study proceeded very well, met all its milestones and produced all its agreed deliverables although some partners were behind schedule in returning these (see below). The flow of the Work packages has worked as expected, with the initial literature reviews (WP 4 and 5) providing excellent information to inform the questionnaire development (WP 6 and 7), which was subsequently been sent to relevant individuals for completion. A key part of the work was to identify a method of defining an urban area, and the definition developed during WP5 was used to inform the questionnaire data collection. Questionnaires were retrieved from 60 European Urban Areas in 30 countries. A large majority of Urban Areas delivered questionnaires of near 100 pages filled with invaluable information about local health indicator availability, definitions and sources. The local respondents were painstaking, conscientious and hard-working. An amazing variety of comparable health indicators are available in the 30 countries. No clear patterns of indicator availability emerged - availability does not seem to depend on country size, location or EU status. The responses to the questionnaires were transferred to a database, forming the basis for the work of WPs 8 and 10. WP 10 prepared a detailed examination of each of the proposed indicators leading to the proposed final set of indicators to be used. This has produced a set of 39 Urban Health Indicators, together with their definitions, which can form the basis of an Urban Health Indicator system. In addition, a number of gaps were identified with the need for the development work required to produce further indicators of relevance to urban health. As part of WP10, a closer study of the process of urban health data collection was performed. This highlighted a number of issues involved with the identification of data sources, many of which were common across European countries and are therefore likely to relate to other research on comparable topics. However, despite the existence of these barriers, and some problems with the international comparability of questions to elicit information, data collection was completed for many of the indicators. Therefore the project has succeeded in identifying both the utility of using some Urban Health Indicators and the availability of data, and has gained an enhanced knowledge of how urban health data are used and routinely collected across Europe. In addition, through the work of WP9, we identified a number of ways in which

health indicators may be presented to enhance their usefulness to health policymakers. A web site and three newsletters have been produced to assist in the dissemination of the results of the project (WP 2).

The two conferences planned under Deliverables 9 and 10 were combined to one for budgetary reasons (as agreed with DG SANCO during the budget discussions prior to the study commencement). This resulted in a final conference for peer reviewers and policy makers, attended by more than 100 people (the implications arising from the conference are reported as part of the WP10 report). The conference identified ways in which the indicators might be incorporated into an EU wide system of urban health indicators. Feedback from the conference showed that all delegates felt the conference had increased awareness of urban health indicators, 89% felt the findings of the EURO-URHIS project would be helpful to policy makers and 86% felt that there was now enough evidence to support inclusion of urban health in all policies. The EURO-URHIS indicators were deemed by all delegates to be useful and not requiring revision despite the need for further development work on additional indicators and methods of implementation. Many different strategies for the implementation of UHIs were discussed through future projects including EURO-URHIS 2, continuing the EURO-URHIS network and formation of a sub-national working group.

In conclusion, the work has demonstrated that urban health and its measurement is of major relevance and importance for Public Health across Europe. The current study has constructed an initial system of European Urban Health Indicators to meet the objectives of the project, but has also clearly demonstrated that further development work is required. The importance and value of examining urban health indicators has been confirmed, and the scene has been set for further studies on this topic.

2. Deliverables

- **D1.** Newsletter 1, Month 1. This was foreshadowed by the creation of the website (Deliverable D3 below), and an introduction to the project and its goals were placed on the website. The timing of the subsequent newsletters was changed to be able to report major items of development in the project. The first major newsletter was disseminated on 1st June 2007, through the web site at: http://www.urhis.eu/pdfs/Euro-URHIS%20newsletter.pdf
- **D2.** Decisions of first general meeting on first year work plan. Month 2. The meeting was held on 16th-18th August 2007 and the summary sent to DG SANCO.
- **D3.** Establish and maintain website. Month 3. A web site was created and can be seen on www.urhis.eu. As well as public access, there is a restricted access facility used for coordination by the study investigators.
- **D4.** Newsletter 2. Month 9. An extensive Newsletter was placed on the web site and disseminated electronically to a wide range of individuals and organisations (fully described in the WP2 report below). This was disseminated in Month 12, rather than month 9, for reasons described in the full report below. A second newsletter was disseminated through the website on December 2nd 2007 at http://www.urhis.eu/pdfs/Euro-URHIS%20newsletter2.pdf
- **D5.** Interim activity report to EU Commission. Month 13. This document was submitted in month 14, and was accepted by the Commission.
- **D6.** Decisions of second general meeting on second year work plan. These are contained in the minutes of the second general meeting, which was held in April 2007 in Athens.
- **D7.** Newsletter 3 was delivered late but has now been submitted and included on the public access website at http://www.urhis.eu/pdfs/Euro-URHIS%20Newsletter%203%20October%202008.pdf
- **D8/9/D10.** The peer review event and policymakers conference on urban health indicators (conflated as previously agreed) were held in association with the final general meeting in Brussels in June 2008.

- **D11/12.** The conference and meeting proceedings were produced as a report of the D8-10 events identified above, and are to be seen as part of the final report of WP10. The conference presentations and proceedings can be seen on the website at http://www.urhis.eu/conferencepresentations.html.
- D13. Final activity report to EU Commission. This executive summary comprises part of that report.
- **D14.** Presentation of urban health database. The WP10 report includes a detailed description of the set of Urban Health Indicators developed as a result of this project. A final list of 39 Urban Health Indicators, termed URHIS 39 is to be seen in that report, and is to be found separately on the website.
- **D15.** User friendly report for health information experts was delivered late but has now been submitted and included on the public access website at http://www.urhis.eu/pdfs/Health%20Experts%20User-friendlyReport.pdf
- **D16.** Submission for publication in peer-review journal. One paper has already been accepted for publication in the European Journal of Public Health. A series of papers are in draft from or completed, and negotiations are taking place with the editorial teams of two journals to see if they would like to have a special issue or supplement with these URHIS papers.

3. Work Packages and milestones achieved

- **WP1.** Coordination. Consortium agreement, achieved. Interim report submitted. Final technical and financial report submitted.
- **WP2.** Dissemination. Website has been produced and three major newsletter disseminated. Peer review event and final conference held (conflated) April 2008.
- **WP3.** Evaluation. Milestones of the project evaluation plan and the interim and final evaluation reports have been achieved.
- WP4. Literature review and appraisal. Milestones have been achieved, the final report included.
- **WP5.** Definition of urban areas and populations. Milestone has been achieved and the final WP report is part of this report.
- **WP6.** Questionnaire development. Milestones of both a draft questionnaire, a final questionnaire and the final WP report (part of this report) have been achieved. Due to illness, the WP leader changed, without delay to milestones or deliverables.
- WP7. Data collection. Collection & collation of data in a database achieved.
- **WP8.** Country summary reports. Final country summary reports produced.
- WP9. Development of policy impact indicators. Completed. Final WP report produced.
- WP10. Description of urban health indicator system. Completed. Final WP report produced.

WP1 Management and Co-ordination

1. Introduction

The objectives of WP1 consist of the management and co-ordination of EURO-URHIS project to ensure all objectives are delivered through the agreed work plan.

The work has been split into:

- 1. **Operational** The executive summary reports on progress on the delivery of milestones and deliverables. The interim and final reports have been co-coordinated through this WP.
- Financial budgets have been successfully transferred to partners after payment
 by the EU Commission the first of which was delayed. Actual costs have been
 reported by partners and included in the Annex II final financial report..
- 3. Technical all research and scientific progress has been managed through organising meetings and setting deadlines. Quality assurance has been co-ordinated through WP1 and delivered by WP3. Alternative arrangements were made when two work package leaders (WP2 and 6) were unable to complete their work plan and leave the consortium. The work was distributed to other partners with minimal disruption to the work plan and some delays in the milestones and deliverables as detailed in the executive summary. Contingency plans for this event were successfully executed. New risks were identified and plans made for this e.g. new deadline for deliverables and modified work plan as agreed by the EU Commission. A substantial amendment to enhance the project's aims and objectives was sought and granted in respect of WPs 2, 9 and 10. Details of the specific work undertaken are presented within each WP report.
- 4. **Legal** the consortium agreements with all partners were negotiated, finalised and agreed. The agreement was constantly monitored by the University of Manchester.

2. Financial Management

The project was given a retrospective start date of 1st August 2006 but, since funds were not transferred to the project until December 2006, it was necessary for the first steering group (SG) meeting to be hosted by the University of Manchester. This allowed the costs for accommodation and food to be calculated at the UK perdiem per delegate rate. The plus difference was credited to the appropriate budget per institution. Similarly, the University of Manchester paid for the Manchester partners and experts from collaborating partners attending the SG second meeting/all partners first meeting (Athens) accommodation with the plus difference reimbursed.

Some of the original co-ordination budget heading costs were transferred to partners in Germany, the Netherlands and Liverpool Sefton for extra support to WPs meetings and representation at the International Conference on Urban Health conference (Amsterdam, 2006).

WP1 - Both Dick Heller and Constantinos Astreos started work August 06 but payment was not commenced by the University of Manchester until February 07 so that their hours worked to date are not a multiple of daily rate daily rate but an actual cost of payments made to date. Vicky Clarke went on maternity leave in February 07 and Lesley Patterson is covering her project commitments. Coordination costs for travel have been transferred to support other WP activities (see WP3, 7 & 10 transfers below). WP1 supported the travel expenses for some of the collaborating partners so they may attend meetings due to their expertise in urban health indicators and collection of the data required.

WP2 - Dissemination was provided at less than estimated capacity in year one (see transfers WP7). A substantial amendment was requested to enhance the scope of the final conference by subsidising some travel costs and providing per-diem payments for more invited delegates and speakers. This activity came in at a cost considerably below the requested budget allocation. Arpana Verma gave extra capacity to this WP which is reflected in her increased person days.

WP3 – A requested (by email to the desk officer) change in the budget was necessary for a more effective implementation of the tasks in the Evaluation Work Package. Specifically, there are fees for Ms. Mariana Sandu for extra work for collaborating with the Bureau of Statistics who deal with data mining and additional fees for Ms. Christina Bamia, who worked as senior statistical scientist and overviewed relevant country data for a month. The requested increase for personnel cost is 7% of the initial budget. All other changes end up to less cost for the EU contribution than in the initial approved budget.

WP5 - The researcher for this started late due to contract delays at the start of the project. The current researcher was further retained to provide extra capacity for WP7 and continued to provide data support for WP9.

WP6 - Extra capacity was required for this WP. Kaspar Bams (WP4 Researcher) was retained to support research for WP6. This was affected by transferring excess budget from recruitment of WP9 researcher in Manchester and some year 1 from the researcher for WP3. Roger Harrison left the project in January 07 so has contributed less person days than anticipated. He was succeeded by Jude Robinson (Liverpool University) as WP leader and she has also contributed the required extra capacity for this WP.

WP7 - The project has recruited many more collaborating partners so that most EU and succession countries were recruited to contribute to the data collection activities. Funds were transferred from some of that allocated to WP2, some WP1 co-ordination costs and from the WP3 evaluation budget to provide extra capacity mainly to allow for recruitment of a dedicated researcher to support the co-ordination of the enhanced data collection activity. Wolfgang Hellmeier and Juergen Breckenkanp in Germany also contributed to WP7 support

WP8 – The lead partners provided their actual costs for the project just in time for inclusion in the final report consolidated budget. Work was completed satisfactorily though delivered later than scheduled.

WP9 - Statistical Researcher Level 6 Perihan Torun was hired at a lower rate than was anticipated see transfer WP6. Wolfgang Hellmeier and Juergen Breckenkanp in Germany are also contributing to WP9 support. Arpana Verma gave extra capacity to this WP which is reflected in her increased person days and a substantial amendment (travel costs for interviews and extra person days for the statistical supervisor, Islay Gemmell) allowed for some extra qualitative work to enhance this WPs objectives.

WP10 – The lead partners provided their actual costs for the project just in time for inclusion in the final report consolidated budget. Work was completed satisfactorily though delivered later than scheduled. An invoice to the main partner for amendment work has also been delivered.

Jude Robinson has provided extra capacity for this WP and this is reflected in increased overheads and extra travel. She also undertook some qualitative work on this WP which was completed with the help of a substantial amendment to allow for transcribing costs.

WP2 Dissemination

1. Background

The North West Health Brussels Office (Sefton PCT) has led Work package n° 2: Dissemination of the results for the EURO-URHIS project. This work package has been vitally important in ensuring the high visibility of the project at all levels (local, national, European and international) and inform and involve a wide array of interested organisations and authorities across Europe. The principle objectives of this work package were:

- To disseminate the project results
- Preparation of reports
- Development and maintenance of a website
- Organize a Peer review event / policymakers conference
- Explore methodology for analysis and reporting of current urban health situation and policy-effectiveness assuring effective dissemination of relevant information.

2. Overview

After a slow start due to staffing issues, WP2 managed to recover and ended up completing all objectives on time and under budget. A sub contracting arrangement was completed with Eurohealthnet in 2007 to aid the dissemination process and creation of dissemination materials and a relevant, targeted contact database. Due to the initial challenges faced, a more detailed work programme was drawn up between the WP2 actors and was subsequently implemented. The 'Development and maintenance of a website' objective was subsequently led by the University of Manchester for staff shortage and efficiency reasons. At the time, all other objectives remained on target for completion.

2a Contacts and Dissemination

The project reports, newsletters and results were disseminated to a large range of audiences. This meant that a large amount of initial research was needed to identify relevant, local, regional, national, European and international organisations to receive this information. This was conducted in collaboration with EuroHealthNet. A database was set up and gradually populated with approximately 1000 relevant, targeted contacts. This included contacts from within the Committee of the Regions, European Commission and Parliament as well as European health networks, country specialists and specific contacts in urban areas. EURO-URHIS Work Package leaders were asked to contribute their own specific country and urban contacts to add to this database, which they subsequently did. This database evolved over the life of the project and was used to good effect in the targeting of speakers and attendees for the final conference which took place in June 2008.

The dissemination work package established the euro@urhis.eu email address which was managed by the North West Health Brussels Office. This address acted act as a key contact point for people wishing to become involved in the project and it was promoted through the EURO-URHIS News publication and the EURO-URHIS website. Through this, active links were created with interested partners and those originally targeted in the WP2 dissemination list. One successful example of these links was the link with the QeC ERAN network, who requested a conference speaker from the EURO-URHIS project. Links have also been created with the International Society for Urban Health. Through this linkage, the EURO-URHIS project was presented at a large scale conference organised by the International Society for Urban Health in Baltimore, USA. EURO-URHIS Project participants attended the event in person, forging closer relations with their American counterparts.

2b Preparation of Newsletters

The first publication (EURO-URHIS Newsletter) was sent in July 2007. Significant time was allocated to the design, production and dissemination of this newsletter. There was comprehensive consultation with all project partners concerning content and style of the newsletter. This first newsletter was behind schedule. A more clearly defined timetable was then put in place for the proceeding two newsletters, due in November 2007 and May 2008 as agreed with the project steering group. The second newsletter was met on time, however it was deemed appropriate that the third and final newsletter should be delayed until after the results of the final conference became available. All newsletters were user-friendly, colourful and fulfil the agreed criteria. Feedback from project partners has been extremely positive. These newsletters have been disseminated extremely widely and promoted through European health networks such as European Public Health Alliance and EuroHealthNet. Newsletters were also disseminated at the Final conference to over 100 attendees.

2c Preparation of Reports

A 'house style' for all reports and newsletters was successfully created. Feedback from project partners and recipients of the documents has been extremely positive. The Interim report was designed and put into the house style in October 2007. At the end of the project, the final report will also be drafted in the 'house style' and will be finalised and disseminated once the content has been finalised by all work package leaders. An easy to access Summary of the project results, together with a list of urban health indicators will also be published in the house style. This will be disseminate to an extremely wide audience, utilising the existing contact list and the project partners individual contacts. European and international networks are also a key target audience for this publication.

All publications have adopted the house style in order to create a common identity for the project. A unique email address was also created and consistently used for the project (euro@urhis.eu) which follows the web address of the EURO-URHIS website. All dissemination of newsletters and general queries relating to the project came from this address, further enhancing the project identity.

3. EURO-URHIS Final Conference

Planning and preparation for the EURO-URHIS final project conference began on time and overall the conference was a success according to work package leaders, project participants and conference attendees.

The title of the conference was 'Improving Health in European Urban Areas: The Role of Urban Health Indicators.' The conference was split into 2 sections (each comprising 1 day) for disseminating the Results of URHIS and presentations and debate on Implementing a system of urban health indicators

AS WP2 leaders we comprehensively consulted with other EURO-URHIS work package leaders and project participants concerning the content, format and objective of the conference. The final objectives of the conference were to:

- present a system of urban health indicators to policy makers and users of data:
- increase the awareness of the need of urban health indicators.
- obtain feedback, suggestion and revisions of the EURO-URHIS indicators.
- develop a plan for implementation of an urban health indicator system.
- advocate inclusion of urban health in all policies.

It was decided that the conference should be held in Brussels in order to maximise the European dimension of the project and to ensure EU institutional attendance. This objective was achieved through the 15 different speakers, from a variety of different countries including Norway, UK, Germany, France, Netherlands and Romania. Speakers also presented from 3 European institutions (European Commission DG Regional Policy and DG SANCO, European Parliament and the Committee of the Regions). The venue for the event was the Committee of the Regions in Brussels. All speakers' presentations were made electronically available straight after the conference, via the EURO-URHIS website.

105 people attended the event in total and post card sized questionnaires were designed in the EURO-URHIS 'house style' and disseminated to every participant, in order to obtain feedback. The feedback received from these postcards was extremely useful and many new contacts were created for the forthcoming EURO-URHIS 2 project. Feedback from members of the project management team and other project participants was also extremely positive.

These feedback forms were part of a project pack that was especially designed for the event, in keeping with the EURO-URHIS house style. This contained newsletters, basic information about the project, (including information about the website and other dissemination activities), and a comprehensive conference agenda.

The conference also comprised an exhibition space where interested participants In the 'Urban Health in Europe' Exhibition space there were 8 exhibitors, 3 from local regional authorities, 2 from universities, 2 from European health networks, 1 from the EURO-URHIS project itself to Explore methodology for analysis and reporting of current urban health situation and policy-effectiveness assuring effective dissemination of relevant information.

The NWHBO, together with the subcontracted partner, EuroHealthNet explored the methods that European and local actors working on urban health use to communicate urban health issues. This work links to the work from WP4, To make an inventory of major European collaborative actions on health (indicators) and to indicate to what extent these actions are relevant for EURO-URHIS. From this joint work and using the results from WP4, a comprehensive database was created of relevant contacts in this field, who will be able to further communicate the results of EURO-URHIS. Networks, organisations and individuals were targeted in order to ensure effective dissemination of relevant information and ensure that policy makers at all levels had access to relevant Urban Health information from the project.

We believe that a good cross section of actors have been identified at European level (networks, European Commission, Parliament etc..) However work must continue even after the end of the project to ensuring that local actors and policy makers within European member states have access to relevant information on urban health indicators in order for them to be able to make effective, informed policy decisions that affect the health of citizens in urban areas.

4. WP2 Inefficiencies

WP2 was originally allocated the task of website creation and maintenance for the EURO-URHIS project, however due to staff shortages within WP2 and to increase efficiency, this task was offered to WP1, who successfully created and are continuing to maintain the website www.urhis.eu

The original timetable for EURO-URHIS Newsletters was at one stage slightly behind schedule due to staff changes in the NWHBO, however with new staff in place the WP created a new timetable for its Newsletters and other work package deliverables, which was approved by the WP1 Management team. This timetable was then successfully actioned for the second newsletter and for the large task of the final conference preparations. However, in the last weeks of the project there have been further unforeseen delays as detailed in the WP1 management report.

5. Further WP2 Documentation

Attached relevant documents relating to the WP2 activities can be found on the website www.urhis.eu from the following direct links:

URHIS Newsletter 1

http://www.urhis.eu/pdfs/Euro-URHIS%20newsletter.pdf

URHIS Newsletter 2

http://www.urhis.eu/pdfs/Euro-URHIS%20newsletter2.pdf

URHIS Newsletter 3

http://www.urhis.eu/pdfs/Euro-URHIS%20Newsletter%203%20October%202008.pdf

Post Final Conference User Friendly Report http://www.urhis.eu/pdfs/Health%20Experts%20User-friendlyReport.pdf

URHIS Dissemination list

http://www.urhis.eu/excel/EURO-URHIS%20All%20Contacts%20Distribution%20List.xls

URHIS Final Conference Agenda

http://www.urhis.eu/pdfs/URHISconferenceagenda.pdf

URHIS Final Conference Feedback Form

http://www.urhis.eu/pdfs/Final%20Conference%20Feedback%20Form.pdf

URHIS Final Conference Attendance list

http://www.urhis.eu/pdfs/Attendees%20at%20Euro-URHIS%20Final%20Conference.pdf

WP3 Evaluation

Based on the Technical Annex description, the objectives of the Evaluation Workpackage aim to select the proper evaluation methodology for all deliverables, to monitor intermediate Project reports and to submit the final evaluation report, at the end of the lifecycle of the Project.

More specifically, the evaluation work included the following:

- Producing Project evaluation plan, referring to the Project objectives and deliverables and describe the methodology to be used
- Review of intermediate reports
- Problem reporting and potential risks
- Final Evaluation Report

The Project work progress was periodically assessed against the project work plan and the Project status was effectively monitored.

The deliverables of the Evaluation Workpackage that have been delivered up to now are The project evaluation plan (month 4) and the Intermediate evaluation report (month 13)

This report is the last deliverable, due at month 24.

In the Project evaluation plan the basic methodology that was used was the identification of measurable criteria or metrics for the various WPs. Feed back from WP leaders and additional criteria were not proposed to be added. So, those metrics were approved by WP leaders and have been eventually applied in the evaluation of Project's deliverables.

In specific, the evaluation process steps were the following:

- Definition and clarification of objectives
- Posing of questions in order to make the objectives clearer
- Application of measurement and data validation when necessary
- Overall analysis and assessment of results
- Evaluation report

EURO- URHIS Project successfully produced the following:

- Sixteen deliverables
- Three newsletters
- Seven reports referring to four respective meetings
- Two conferences
- One peer review meeting
- A website
- A database
- Four reports (two to be forwarded to EU Project Officers and two to the scientific community)

For evaluation purposes the main criteria that have been used were grouped in two categories, as they were described in the Project's Technical Annex:

Content criteria: Completeness, Clarity and unambiguity, Appropriate level of detail, Consistency, Verifiability of contents

Appearance criteria: Readability, Terminology, Definitions of concepts, Structure

During the lifecycle of the Project and within the timeframe that was set in Project's Technical Annex (except in the case of WP8, where a small delay was encountered), we received the first versions of all deliverables that were due, namely: WP4, WP5, WP6, WP7, WP8, WP9, WP10 and WP1. It is also noted that the electronic database and the development of the website of Urhis Project (the tasks of which were transferred to WP1) functioned smoothly and effectively disseminated Project's results, also via the newsletters and the final EURO URHIS Conference in Brussels.

All Project's documents were evaluated and suggestions have been made to the WP leaders as well as to the Project co-ordinator to take action, if needed. All those suggestions were taken into account and have been incorporated in the final version in the respective deliverables in due time and before their submission to the Commission.

In some cases, like that one for WP8 and WP10 there was a need to respond first at a rather general level, suggest key specific corrective action and afterwards the completion of the suggested tasks, a more detailed evaluation took place.

In conclusion, all the planned activities of the evaluation WP were effective and on schedule. In addition, the collaboration with all WP leaders was flawless. As a result, the planned work was efficiently implemented and no problems were encountered.

All evaluation reports that have been made in the frame of the work of WP3 are attached to this summary report at appendix VIII.

WP 4 Literature Review and Appraisal

Summary

1. Introduction

The European Urban Health Indicators System (EURO-URHIS) project is targeted at the development of an urban health indicator system. EURO-URHIS will support policy-making, identify and prioritize urban health problems on the basis of evidence and enable the monitoring of the effects of actions taken to address them. From August 2006, an international group led by the University of Manchester in the United Kingdom has started work on the development of such a system. The project is subdivided into 10 work packages (WPs). This report describes the results of WP4, the literature review and appraisal, which forms the basis for the whole project.

2. The purpose of WP4

WP 4 intended to contribute towards efforts in defining the concept of urban health and the selection of urban health indicators as well as making an inventory of European collaborative actions.

2a Concept of urban health and urban health research

A comprehensive and commonly agreed definition of the concept of urban health was not found, however, a short working definition can be that it concerns public health that is specific to cities. With regard to health monitoring there are no specific research methods required in cities, however, monitoring is more complex. This relates to the presence of a higher population proportion of low socioeconomic groups threatening representativeness and validity, and larger groups of hidden populations, such as drug users and homeless people.

No determinants and diseases that are uniquely specific to urban areas were found, however, the prevalence between urban and non-urban areas can be quite different. A number of diseases are of concern primarily in cities (such as AIDS and asthma). There are also a number of environmental problems with a higher prevalence in urban areas (including water quality, population density, housing conditions, and air pollution). In some countries the health situation is better in urban areas, whereas in others it is the opposite. Further, there can be large health differences within cities between suburbs. What makes monitoring of urban health different from monitoring on a national level is that there are different actors that steer health policy and practice. As a result of these factors, relevant indicators can vary between and urban and a national level.

An urban health indicator model was developed to serve as a conceptual framework and logical classification tool. The steering group of EURO-URHIS agreed upon using the ECHI shortlist as a point of departure for indicator selection. The ECHI model is not specific for urban areas, and could be more comprehensive so we adapted a model developed in the USA [Galea et al 2005] by combining it with the ECHI indicator sets.

2b Inventory of major European collaborative actions

There are many actions on public health at the European level but the main organisations involved in these are the European Union, the World Health Organisation (WHO) and the Organisation for Economic Co-operation and Development (OECD). The described projects could be interesting for Euro-URHIS as examples to learn lessons from and/ or as (potential) collaborative partners.

The Isare project, Megapoles and the Urban Audit (UA) show that is possible to gather comparative regional data on the European level, but these initiatives also indicate that it takes a long time to achieve

results. UA is of interest to EURO-URHIS as a collaborative partner for the data collection since they have already established an urban network through the whole European Union and have constructed a functional urban region for every participating city within it. UA have mainly economic, social and cultural indicators which may provide a broader insight into the conditions that shape urban health.

The European Urban Knowledge Network and the WHO Healthy Cities programme are particularly useful for the dissemination and communication of the project results. The EUPHIX project is of particular interest with regard to the possibility of a web-based information system for the distribution of data.

2c Inventory and selection of urban health indicators

At the start of the project was agreed by the steering group that the ECHI short list would be the starting point of the indicator set for EURO-URHIS. This principle is in line with the EUPH Programme. The ECHI shortlist can be seen as a list of health indicators from the perspective of a high level public health policy maker who wants to obtain a 'helicopter' or 'cockpit' view on 'the most important' issues. In order to evaluate the ECHI list on usefulness and comprehensiveness in urban areas, literature and policy documents were screened to make a first inventory of themes that appear of high and low interest in urban areas. This resulted in a preferred topic list. To further guide the selection of urban indicators, specific criteria were formulated with regard to content and methodological requirements.

The resulting urban health indicator list of 50 items (EURO-URHIS-50) has to be considered as preliminary as actual data availability will be surveyed in a large number of EU cities in forthcoming work packages. The rationale that was adopted was that indicators rarely available may be omitted, and those that are missed but considered important may be added.

3. Main conclusions

- There are no health problems unique to urban areas. However, the study of urban health is important because of the high numbers of people living in cities, the stresses and strains of urban living, and the impact of factors associated with urban areas, such as air pollution, poor housing and a lack of good quality green space. Besides, problems frequently heap in urban areas. The study of urban health has therefore legitimacy as a separate research discipline.
- The ECHI shortlist is a draft of indicators for a broadly view on population health. Most of the listed indicators are also useful for urban health researchers. For the study of urban health are some extra indicators needed, mainly indicators regarding the social and physical environment and marginalised populations.
- Megapoles and the Urban Audit have proved that data collection on the urban level is possible in Europe. The collected data illustrate that (health) data in urban areas are often distinct from those of a whole country. This outcome shows the need for comparisons between similar areas in different countries, for example to provide evidence of effectiveness of public health strategies. Results proves that comparable data on the urban level are very appreciated by urban health policy makers. More health data is appreciated. This is legitimacy for a project such as EURO-URHIS.

4. Recommendations

- Develop definitions for indicators that have not been selected, because no appropriate definitions have been found. E.g. physical activity and nutrition are essential for the study of urban health.
- Explore possible cooperation with the Urban audit. The Urban Audit has already established an urban network through the whole European Union. Their country representatives could function as representative for EURO-URHIS or advice on the optimum person(s) for collecting health data in all member states. Urban Audit has an actual functional urban region constructed for every participating city. These so called larger urban zones are also an appropriate administrative level for the exchange of health information. Data collected by the Urban Audit can help to gain better insights into the conditions that shape urban health. E.g. indicators about housing, transport, employment and culture.

- We consider it as very important that the preliminary indicator list (called URHIS-50) is tested
 to determine whether the indicators represent a useful and appropriate means of assessing
 urban health in Europe and whether the indicators have been clearly identified and defined.
- Develop appropriate protocols, methods and tools to allow policy-makers to understand and use the collected health data. This will be very important to convince policy makers of the strengths of a project such as EURO-URHIS.

Main Report

1. General background

From 2007, more than half of the world's population will be living in cities. The health needs of urban dwellers, and the ability to monitor urban health, become high priority. The European Union Programme of Community Action in the Field of Public Health (EUPH) identified the development of an urban health indicator system as an essential part of a comprehensive and integrated EU health information and knowledge system. From August 2006, an international group led by the University of Manchester in the United Kingdom has started work on the development of such a system.

EURO-URHIS will support policy-making, identify and prioritize urban health problems on the basis of evidence and enable the monitoring of the effects of actions taken to address them. In addition, it will enhance timely access to information, facilitate communication with the public and contribute in building advocacy, communication and education strategies. Finally, by using standardized methodology for data collection, processing and dissemination, transnational comparisons and time trend analyses will become feasible.

The activities for the development of EURO-URHIS are subdivided into ten work packages. This paper gives the main results of WP4. These outcomes form the basis of the whole project. The task of this WP was to:

- To describe the concept of urban health and urban health research;
- To make an inventory of major European collaborative actions on health (indicators) and to indicate to what extent these actions are relevant for EURO-URHIS;
- To make a review of urban health topics according to scientific literature and political documents and to present a preliminary table with indicators that are important for the study of urban health.

This report is composed of three sections. Chapter 2 describes theoretical issues about urban health and identifies a model for the study of urban health. Chapter 3 gives an overview of collaborative actions. It summarizes what already has been undertaken in the field of European public health, how EURO-URHIS could learn from and co-operate with these related initiatives.

The tasks 3 and 4 are treated in chapter 4. This chapter gives an enumeration of current urban health topics and describes how the preliminary table with indicators has been achieved.

The preliminary table has been listed at appendix I in this report.

2. Theoretical background

This chapter discusses theoretical issues that form an important background on the subject. The research questions are:

- · What are health indicators
- What is an urban area

- What is urban health
- What are the peculiarities of urban health monitoring
- Which model could guide urban health research

2a What are health indicators?

It is intended by DG SANCO that the various projects funded under the EUPH Programme, and the indicators they recommend, must be brought together to form a single system for use in the European Community. The European Community Health Indicators (ECHI) framework has been established to propose such a framework. The ECHI project describes an indicator as 'a concise definition of a concept meant to provide maximal information on an area of interest' [Kramers, 2005]. This implies a few things. An indicator should:

- 1. Tell us something about an area of interest for (policy) action, sometimes defined as a concrete policy target (e.g., reduce the percentage of smokers to less than 20%);
- 2. Do this in a maximally efficient way, i.e. provide the simplest possible numerical presentation, calculated from basic data, to give a robust view of the situation (e.g. life expectancy as a measure for the overall age-specific mortality).

In the ECHI context, the word indicator has been used in a rather broad way, sometimes referring to 'topics' or 'issues' ('generic indicators'), and sometimes to precisely defined 'operational indicators'. The term 'alcohol use' is an example of a generic indicator. Specifications like 'percent of the male population over age 16 drinking 4 glasses per day or more', or 'percent of 14-18 year old drinking alcohol', are examples of operational indicators.

Generic indicators are sometimes named determinants of health; factors which determine health. The effect of a determinant can be proximate and contributory. Tobacco smoking is the proximate determinant for several diseases. The propensity of an individual to smoke and therefore the prevalence of smoking in a community are influenced by a range of contributory determinants e.g. age, gender, social class, peer pressure etc. Contributory determinants create the conditions for, or increase the effect of the proximate determinants. Sometimes it is only possible to act on the contributory determinants e.g. where atmospheric pollution is the proximate determinant for several diseases and the contributory determinants are nearness of industry and traffic intensity.

2b What is an urban area?

Definitions for urban vary amongst different nations. An urban area is frequently called a city or town. Main criteria used to define an urban area are absolute numbers of inhabitants and population density. It is however difficult to give a comprehensive definition that could be used across Europe. The developing of a suitable definition of urban areas for EURO-URHIS and the identification of the most appropriate administrative level to collect health data falls outside the scope of WP4 but will be reported under WP5.

2c What is urban health?

There does not yet seem to be a widely accepted definition of urban health. Similarly, there is no absolute consensus on the meaning of the term public health within the European community. For some, public health mainly concerns the health sector itself while others only consider health interventions other than acute (hospital based) services. Still others have a broader vision that embraces all measures aimed at improving health, setting up services included [Horton, 1998].

A short definition for urban health can be that it concerns public health that is specific to cities. However, for the identification of urban health indicators and the rest of the aims of EURO-URHIS it is essential to come up with a more comprehensive working definition of urban health. The term urban health has arisen in the United States and refers to the holistic approach to health in urban areas proposed by the WHO Healthy Cities project and also designates projects that target specific urban groups. The WHO definition of a healthy city is,

"a city that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential" [Hancock & Duhl, 1988].

The Center for Epidemiologic Studies at the New York Academy of Medicine is specialised in urban health. Galea and Vlahov of this institute consider urban health research to be the explicit investigation of the relation between the urban context and population distribution of health and disease. This view is clarified with the following working definition of urban health:

"urban health concerns itself with the determinants of health and diseases in urban areas and with the urban context itself as the exposure of interest" [Galea & Vlahov, 2005].

This definition seems workable for the aims of EURO-URHIS.

2d What are the peculiarities of urban health monitoring?

Public health monitoring is, amongst other things, about collecting information that will help policy makers to evaluate health interventions. It is important that this information is collected in a planned and organised way and with uniform indicators. For the monitoring of urban health it is important to know whether determinants of urban health differ from those of public health in general. What makes monitoring of urban health different from monitoring on a national level is that policy actors diverge. Health services, health promotion and legal instruments act differently on the local level than on the national level so it follows that relevant indicators can be different on urban compared to national level. What makes urban health monitoring further distinct from general public health monitoring is the emphasis on specific themes, such as air-pollution, urban sprawl, and mental health. Cities can have a greater proportion of marginalized populations (e.g. homeless people, drug addicts, and migrants) than rural areas. Some disease epidemics can spread more rapidly in urban areas than in rural areas and cities are also more vulnerable bioterrorism, because of population density and air travel. These determinants and diseases therefore need special attention in urban health monitoring. Paragraph 2.5 specifies the conditions that influence urban health.

Whether a monitor outcome is positive or negative depends on the kind of comparison. We can consider different types of studies, such as:

- relating differences at different points in time, for example before and after an intervention;
- · comparing urban and rural communities;
- · comparing cities within countries or across countries;
- examining intra-neighbourhood variations in health.

If a city ranks better as a rural community or a country in general do we speak of an urban health advantage. To express a negative outcome for a city do we use the term urban health penalty. The term urbanicity is frequently been used in this context. This expression refers to the presence of conditions that are particular to urban areas or present largely in non-urban areas. These particularities do not necessarily make the level of urban health lower than the level of rural health. Several studies show that, in some countries, people living in urban areas have a better health status and there can be large health differences within the suburbs of cities compared to the host city overall. For example, the infant mortality rates per (1,000 live births) across developing countries were 86 for rural areas, 75 for the urban poor, and 56 for the urban non poor [Montgomery et al, 2003].

Another issue is whether urban health monitoring needs other methods as public health monitoring in general. Urban health monitoring uses similar techniques and sources as rural or public health monitoring in general, e.g. disease registers, surveys, panels and experts. A possible difference is that more effort is needed to get good representative data. The response on questionnaires in cities is significantly lower than in the countryside. The supposed background of this difference is the more diverse population in urbanized areas. Research on this topic in the city of Utrecht in the Netherlands [Carlier, 2007] proved that marginalized groups (e.g. people with a lower SES or ethnic minority groups) have a lower tendency to fill

in a questionnaire. Reasons for this were found to be that they don't see the need for it or consider it as too much work. Having a lower command of language and a relative lack of essential medical knowledge were also found to be inhibiting factors. The research also showed that many questions are socio-culturally sensitive so that questions are not always comprehensible to such groups. A tendency for civilians with a high SES to refuse to participate in research was also found. These groups refuse to participate because of a growing resistance against any form of interview, profit or non-profit and privacy reasons. All these discrepancies could lead to underestimation or exaggeration of certain problems in cities.

2e Which model could guide urban health research?

From the start of WP4, there was a need to devise a model to facilitate insight into the processes, conditions and determinants that influence the urban context and the health status of city residents. There was also a necessity for a classification of these indicators. The aim was to devise a model that could satisfy both these requirements.

The ECHI model

The steering group of EURO-URHIS agreed upon using ECHI as a point of departure for indicator selection. The ECHI model [Kramers, 2005] offers an indicator classification in 4 main categories:

- Class 1: Demographic and socio-economic situation indicators;
- Class 2: Health status indicators:
- Class 3: Determinants of health;
- Class 4: Health interventions (services and promotion) indicators.

This logical grouping goes back to the public health model connected to the name of the Canadian health minister Marc Lalonde [1974]. This model divides the determinants of health into four domains: biological and genetic factors; lifestyle; the environment and the health care system. The implication of this is twofold:

Health is viewed as more than the absence of diseases, and has components of functioning and wellbeing [WHO, 1948],

Public health policies and interventions try to improve health by acting on those four groups of 'health determinants'.

Specific urban health model

The ECHI model can serve as a classification for EURO-URHIS as well. It has, however, limitations as a selection tool since it does not provide an insight in the factors that influence urban health. It is not specific for urban areas, and could be more comprehensive. A conceptual framework of the US urban health researchers Galea et al [2005] does meet this condition. This framework reflects social views of cities and their problems and is meant to guide public health interventions and research. It is, however, based on another arrangement of indicators. We adapted this model by combining it with the ECHI indicator sets and making the model more multidirectorial (figure 1).

The model for the study of urban health distinguishes three levels of influence: enduring structures; major global and national trends and municipal level determinants. These elements form the urban living conditions. As a result of the complexity of the potential relations among the determinants of health of urban populations, this framework simplifies a number of potential relations between the domains. A more detailed description of some of the plausible relations between key variables, is provided below. Many examples are taken from the paper by Galea et al [2005] that illustrates the USA urban health framework. Some sections have been complemented with European illustrations.

Enduring structures

This component of the model includes e.g. the existing political and economic systems, and the prevailing religion and culture of an urban area. It is difficult to influence these kind of constitutions. They change usually in a slow scale time. Their importance is that they shape the other components highlighted in the model [Galea et al, 2005].

Major global and national trends

Important factors in this component of the model are immigration, (sub) urbanization, changes in the role of the government and globalization.

Immigration could affects health in cities in different ways. Illegal immigrants lack often insurance coverage and face language and cultural barriers for a proper access to health care. A large part of immigrants are refugees from developing countries where infectious diseases (e.g. tuberculosis and hepatitis) are prevalent. Besides, they are mostly poorer than the mainstream population. Immigration could also have positive effects on health. Immigrants bring lifestyles and support systems that protect them against some of the adverse outcomes that other low income-income urban residents experience, such as infant mortality and diabetes. However, some of these protections fade after a generation or two of exposure to urban conditions. Immigration often contributes to prosperity, in particular in countries with a low birth weight. However, a large influx of immigrants could tax the available houses, jobs and health care facilities [Galea et al, 2005].

Urbanisation is the increase in the population of cities in proportion to the region's rural population. Thus, the process of urbanisation is not dependent on definition of urban per se, but rather on the dynamics of agglomeration of individuals. Factors such as population mobility, segregation, and industrialisation are components of the process. "The effect on health of urbanisation is two-edged. On the one hand, there are the benefits of ready access to healthcare, sanitation, and secure nutrition, whilst on the other there are the evils of overcrowding, pollution, social deprivation, crime, and stress-related illness. In less developed countries, urbanisation also opens the door to 'western' diseases, including hypertension, heart disease, obesity, diabetes and asthma" [Godfrey & Julien, 2005].

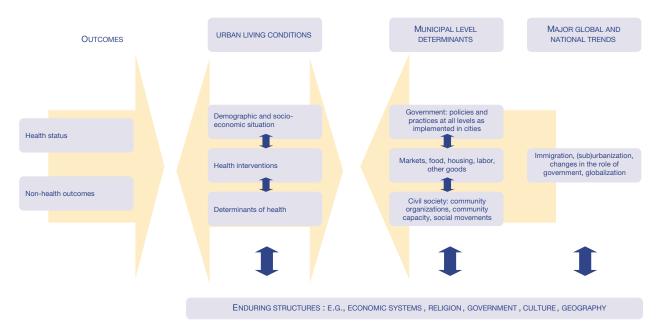


Figure 1: A model for the study of urban health (adopted from the model by Galea et al 2005)

Traditional urbanisation exhibits a concentration of human activities and settlements around the downtown area. When the residential area shifts outward, this is called suburbanisation.

A process which coincides with suburbanisation is urban sprawl. "Classically, urban sprawl is an US phenomenon associated with the rapid low-density outward expansion of US cities, stemming back to the early part of the 20th century. It was fuelled by the rapid growth of private car ownership and the preference for detached houses with gardens. In Europe, cities have traditionally been much more compact, developing a dense historical core shaped before the emergence of modern transport systems. Compared to most American cities, their European counterparts still remain in many cases compact. However, European cities were more compact and less sprawled in the mid 1950s than they are today, and urban sprawl is now a common phenomenon throughout Europe. Moreover, there is no apparent slowing in these trends. The urban areas particularly at risk are in the southern, eastern and central parts of Europe. Urban sprawl produces many adverse environmental impacts that have direct impacts on the quality of life and human health in cities, such as poor air quality and high noise levels that often exceed the agreed human safety limits" [EEA, 2006].

Regarding changes in the role of the government, the public sector is engaged in a wide range of activities from education, healthcare and social security to protecting consumers and strengthening the environment. Trends in the role of the government affect the financial and political support that municipal governments can mobilize to confront new threats to health. The government supports urban economic development, created safety net programmes to protect vulnerable populations, contributed to the construction of urban infrastructures for water sanitation, and sewage and subsidized an increasing portion of municipal budgets. A sudden transformation, such as the former communist countries in Middle and East Europe underwent in the nineties, will have deep impact on for instance role of the government, labour and attitudes and as a consequence on health outcomes.

Globalisation describes the increased mobility of goods, services, labour, technology and capital throughout the world [Slottje & Hayes, 1987]. Examples of how globalization affects health are:

- SARS virus and its spread
- The tobacco industry
- · Western eating habits and their associated health implications being adopted all over the world
- Drug discovery and intellectual property rights
- Multilateral trade agreements and their effects on health

As emerging economies are under more and more pressure to participate in competitive markets, healthcare and welfare are being increasingly marginalised [Globalization and Health, 2007]

Municipal determinants

"While national and international trends influence living conditions in cities directly, their impacts is often mediated by municipal determinants of health. This includes all activities of government, markets and the actions of civil society" [Galea et al, 2005].

"Municipal governments influence the health of urban populations by providing services, regulating activities that affect health, and setting the parameters for urban development. Municipal governments have the capacity to modify the urban physical and social environments and to deliver or oversee the delivery of public health care and social services. Government activities in many sectors affect health, including those in public safety, criminal justice, welfare, housing and employment. While these municipal services are strongly influenced by national or regional policies, implementation often results at the local level" [Galea et al, 2005].

In the urban setting, markets allocate housing, food, employment opportunities, medical care, and transportation and, due to privatization, increasingly play a role in education, public safety and other sectors previously confined to the public realm [Seidenstat, 1999]. Housing is for instance an important determinant for homelessness. Homelessness has been associated with a variety of adverse health outcomes. Markets can also affect health by making unhealthy products too available. This is one of the causes of the epidemic of obesity [Galea et al, 2005].

"The civil society is the space not controlled by government or the market where residents interact to achieve common goals. Related concepts include social capital, social cohesion, social support,

community capacity and community competence, Organizations in this domain are for instance churches and civil right, women's, environmental, and gay rights movements" [Galea et al, 2005].

Urban living conditions

The urban living conditions are the particular characteristics of urban life. Sometimes the term urbanism is used to indicate these characteristics. The conditions are in the adopted model classified according the ECHI arrangement: demographic and socio-economic situation, determinants of health and health systems.

Demographic and socio-economic situation

This determinant focuses on the population structure and the processes and dynamics in this structure. Commonly-used indicators are age, ethnicity, income, education, life expectancy and employment status. Changes in knowledge, skills, culture or behaviour of people will have influence on the health status of the population. These characteristics interact with the other determinants of urban populations. Population ageing has for instance a direct impact on the health care system. The demand for health care will increase with population ageing and costs of health care systems will rise.

Determinants of health

The determinants of health include the social environment, the physical environment and person's individual characteristics and behaviours. The social environment represents the external conditions under which people engage in social activity within their community. Components of the social environment include social networks, social capital, segregation, and the social support that interpersonal interactions provide.

The physical environment stands for the external conditions under which we live. It includes the built environment, the air city dwellers breathe, the water they drink and bathe in, the indoor and outdoor noise they hear, the parkland inside and surrounding the city, and the geological and climate conditions of the site where the city is located.

The relation of these conditions with the person's individual characteristics and behaviours is complex. Verheij [1994] wrote a comprehensive review of articles about the role of the environment in explaining the health of individuals. His point of departure was the drift and breeder hypothesis (Table 1).

His evaluation leads to the conclusion that emphasis in research has been primarily on urban constraints rather than opportunities. Positive aspects of urban living are often insufficiently appreciated. Another conclusion is that the extent to which the environment exerts influence on a person's health is dependent on that person's individual characteristics.

Breeder hypothesis: spatial concentration of illness caused by variations in:

- exposure to environmental factors (e.g. pollution, traffic, housing quality)
- behaviour (e.g. drug/ alcohol abuse, physical exercise, church attendance)

Drift hypothesis: spatial concentration of illness caused by:

- direct selection: ill people move to (or from) specific environments or remain in these environments
- susceptible persons move to (or from) specific environments or remain here

Table 1 Four mechanism to account for geographical variations in health

Health interventions

This class is about health services, health interventions and health promotion. Limited access to health services is particular in the United States a hot issue. The federal government does not guarantee universal health care to all its citizens. In Europe national policy makers broadly agree on universal access for all citizens, effective care for better health outcomes, efficient use of resources, high-quality services and responsiveness to patient concerns. Yet, this clear consensus can only be observed at

the abstract policy level. European decision makers seek to translate their objectives into the nuts and bolts of health system organisation, common principles rapidly devolve into divergent, occasionally contradictory, approaches [European Observatory on Health Systems and Policies, 2004].

Health interventions and health promotion activities have a central place in urban health. These actions include strategies to change risk behaviour of individuals, to alter social and physical environments, and to modify health and social services [Galea et al, 2005].

Outcomes

The outcome column consists of health status and non-health indicators. The health status segment contains indicators on various aspects of the actual health situation of the population as the incidence of sicknesses, but also indicators concerning causes of death and composite health status measures. The non-health outcomes segment includes social, economic and environmental outcomes.

2f Conclusion

This chapter studied theoretical issues on urban health. It is difficult to define the concept of urban health, because there are no determinants and diseases specific to urban areas. In essence it concerns public health specific for cities. However, the concept has a legitimacy as a research discipline because the health status of citizens, the determinants and the impact of health interventions is often different in urban than in non-urban areas. Therefore, relevant indicators can be different on urban compared to national level. In particular indicators concerning the social and physical environment. Another legitimacy for a separate study of urban health is that monitoring in cities is more complex given the presence of a higher proportion of low socioeconomic groups and larger groups of hidden populations, such as drug users and homeless people. This complexity could threaten the validity of data.

An urban health model was developed to serve as a conceptual framework and logical classification tool. The model gives a comprehensive understanding of the particularities of urban health. The model could help both urban health policy makers and urban health researchers with their work. The model proves that the study of urban health is complex. It will be impossible to seize all conditions and determinants in a practical urban health indicator set therefore choices have to be made. An advantage of the model is that it could help to focus on fundamental health topics. The determinants from the enduring structures, major global and national trends and municipal determinants columns are mainly contributory determinants of health that fall outside the influence of urban health policy makers. Urban health policy makers have no direct influence on housing or labour strategies in a city so that these contributory determinants may have a lower priority for urban health decision-makers. The urban living conditions are of more significance to health interventionists.

3. Overview of European collaborative initiatives

At the European level there are many efforts in developing and implementing standardized health indicators. Besides are there several networking initiatives. For EURO-URHIS the most relevant programmes and projects are carried out by the European Commission (EC), WHO Europe and the Organisation for Economic Co-operation and Development (OECD).

This chapter summarises these programs. Paragraph 3.1 discusses some relevant initiatives of the EC. Paragraph 3.2 and 3.3 examine respectively related projects of WHO Europe and the OECD. The chapter ends with a paragraph that will indicate to what extent the discussed initiatives connect with EURO-URHIS.

This overview does not pretend to be complete. There are almost certainly more relevant initiatives. This summary should be considered as a foundation that can be expanded during the project's lifetime. Many of the initiatives are in progress a link to the relevant website is provided for up-to-date information.

3a European Commission

The EC is the executive body of the European Union.. EURO-URHIS is funded by DG SANCO (Direction Générale Santé et Protection des Consommateurs), the Health and Consumer Protection Directorate General. One of the aims of DG SANCO is to produce comparable information on health and health-related behaviour of the population, and on diseases and health systems. The Programme of Community Action in the Field of Public Health supports this purpose. This programme and related projects are discussed below. Other relevant DG's for EURO-URHIS are: DG Eurostat; DG Regional Policy and DG Environment.

DG Eurostat is the statistical department of the EC. DG Regional Policy is responsible for the economic and social development of the less-favoured regions of the EU. A project of DG Regional Policy related to cities, is the Urban Audit...

The main role of DG Environment is to initiate and define new environmental legislation and to ensure that agreed measures are put into practice in all the EU Member States. DG Environment is a key partner of the European Environment Agency. This initiative will be described in paragraph 3.1.4. The paragraph ends with a description of the European Urban Knowledge Network, an association of several EU institutions.

Programme of Community Action in the Field of Public Health

The Programme of Community Action in the Field of Public Health (EUPH) runs for a 6-year period (from 1 January 2003 to 31 December 2008). It proceeds from the work of the Health Monitoring Programme (1997-2002). EUPH is based on three general objectives: health information, rapid reaction to health threats and health promotion through addressing health determinants. Activities such as networks, coordinated responses, sharing of experience, training and dissemination of information and knowledge will be interlinked and mutually reinforced. The purpose is to embody an integrated approach towards protecting and improving health. As part of this integrated approach, particular attention is paid to the creation of links with other community programmes and actions. Health impact assessment of proposals under other community policies and activities, such as research, internal market, agriculture or environment will be used as a tool to ensure the consistency of the EU health strategy. Achieving the overall aim and the general objectives requires effective co-operation of the EU member states and dialogue with all key partners such as non-governmental organisations. Institutions, associations, organizations and bodies in the health field who are encouraged to submit projects for implementing specific priorities.

Eight projects within the EUPH programme are particularly relevant to the work of EURO-URHIS. The ISARE project and Megapoles started within the framework of the Health Monitoring Programme.

ECHIM

European Community Health Indicators Monitoring is a three-year project to develop and implement health indicators and health monitoring in the EU. It continues the work of the ECHI-1 and ECHI-2 projects started in 1998. These projects established a set of community health indicators for the monitoring of community programmes and other community policies. It also provided common measurements for making comparisons. The set is called the ECHI long list. This long list should be seen as a structured inventory of indicators and draft indicators, from which subsets could be selected for further development under various arrangements.

At the start of ECHI, the wish was to have one list of 'core' indicators and another containing 'background' indicators. The project group then considered that what could be determined as 'core', could depend on user's interest bias, which led to the creation of the 'user-window' (UW) concept. The principle of an UW is that it selects a subset of indicators from the long list, based on a particular perspective or interest. The final ECHI report (June 20, 2005) proposed 22 UW's in two groups. The first group includes sets of indicators as they are recommended by a specific HMP projects, or recently by the WPI. The second group consists of sets that are proposed by the ECHI team.

The ECHI project group also created a shortlist from the long list. This list can be seen as an UW from the perspective of a high level public health policy maker who wants to obtain a 'helicopter' or 'cockpit' view on 'the most important' issues. The ECHI shortlist is therefore sometimes called UW-0. This shortlist is the starting point for the EURO-URHIS indicator list (see paragraph 4.5).

Another outcome of the ECHI project is the International Compendium of Health Indicators (ICHI). ICHI includes, besides the indicators from the ECHI long list, health indicators used by DG Eurostat, WHO Europe and the OECD. ICHI is accessible via www.healthindicators.org. This website allows the direct comparison of indicators and indicator definitions and it allows the creation of an UW list.

ECHIM acts also as the scientific secretariat of the Working Party Indicators (WPI). The WPI is an effort to co-ordinate horizontally all activities of the EUPH. It ensures that indicators are developed in line with needs and that the pre-requisites for indicator implementation are created. The WPI is coordinated by the National Public Health Institute of Finland.

EUPHIX

The aspiration of the European Public Health Information, Knowledge & Data Management System project is to develop a prototype for a sustainable, web-based health information system for the EU. EUPHIX aims to support public health and health policy making at European, national and regional levels. Along with public health professionals, policy makers are the most important target group for EUPHIX and will offer:

- information on the health of population across the EU, the causes and consequences of (ill-) health, as well as on health policies and strategies at EU and national levels;
- aggregated data, related and linked to indicators and derived from validated sources, such as DG Eurostat, WHO and OECD
- textual contributions providing knowledge from EU experts and expert networks
- tables, graphs and maps displaying national and regional health data, as well as international comparisons
- internal and external links, references, definitions and other relevant information

EUPHIX project partners are a number of national and international organisations dealing with public health and are represented by one or more of their public health experts. The EUPHIX project management is located at the Centre for Public Health Forecasting at the National Institute for Public Health and the Environment (RIVM) in the Netherlands. The RIVM is also co-financer.

More information: www.euphix.info

EUROTHINE

EUROTHINE stands for Tackling Health Inequalities In Europe. The over-all purpose of this project is to facilitate mutual learning by collecting and analyzing information from different European countries that will help policy-makers at the European and national level to develop rational strategies for tackling socioeconomic inequalities in health. The specific objectives are:

- to develop and collect health inequalities indicators, and to provide benchmarking data on inequalities in health and health determinants to participating countries
- to assess evidence on the effectiveness of policies and interventions to address the determinants of health inequalities, and to make recommendations on strategies for reducing health inequalities in participating countries
- to disseminate the results, and to develop a proposal for a permanent European clearing house for tackling health inequalities

More information: http://www.erasmusmc.nl/mgz

The European Union Health Surveys Information Database project maintains and updates a database of the characteristics of all health interview surveys (HIS) and health examination surveys (HES) in Europe. The purpose is to improve information and knowledge for the development of public health and access to and the transfer of data at EU level. Recommended instruments will also be included and regularly updated in the database in order to promote the use of these within the surveys in Europe. The development of the project will be supervised by a steering group of health survey experts. The following methods will be applied for the data collection and/or dissemination:

- identification of new surveys and of person/institution in charge in each country
- collection of survey questionnaires and examination protocols in national language and translation in English
- collection of information about survey design
- coding of questions/examinations protocols
- input of information in the HIS/HES database
- feedback to and correction by information provider
- comparison of questions/examinations with recommended instrument
- availability of the information through the EUHSID website

More information: http://ec.europa.eu/health/ph_projects/2004/action1/action1_2004_01_en.htm

FEHES

The objective of the Feasibility of a European Health Examination Survey project is to contribute to the development of the European Health Survey System by examining and analyzing the feasibility of carrying out a European Health Examination Survey (HES) or repeated HES's in EU member states. The specific objectives are to:

- create a network of experts and institutes for implementing HES in all EU Member States
- describe and analyze the feasibility of models of HES with different intensity and cost
- collect and assess in all EU-countries information on factors affecting feasibility of HES
- make proposals and recommendations for the future of HES in EU and all Member States
- prepare a proposal for a European HES pilot to be carried out both in Member States

More information: www.ktl.fi/fehes.

ISARE

ISARE (Indicateurs de Santé dans les Régions d'Europe), "Health Indicators in the European Regions" is undertaken by the Fédération Nationale des Observatoires Régionaux de Santé (FNORS) in France. It started within the framework of the Health Monitoring Programme (1997-2002). The aim of ISARE is to allow health professionals and decision-makers to put the characteristics of their own area in the wider context of all other regions across the EU. The rationale for the project are that diseases know no boundaries, that national averages hide important variations in health, and to stress the importance of the regional level in health policies and in the management of the health system.

So far, there have been three phases. ISARE 1 (1999-2001) identified for each country the most appropriate sub-national level for exchange of health indicators within the EU, and to assess the extent of data availability at these levels. ISARE 2 (2002-2004) tested the feasibility of collecting regional data in each European country and this incorporated a database demonstrator, which illustrated the interest of this work. This demonstrator allows examination of the database by allowing the user to select a theme then an indicator. This produces the value of this indicator for either the whole or a subset of a region. The second interrogation mode provides a synthetic view about the regional situation for a set of indicators. The user initially selects a country, then a region within it and finally a theme.

ISARE III started in 2006. The goal of this phase is to extend the results of the ISARE I and II projects to the new member states and to update the information for the countries included in the ISARE II project. The objective also checks different methods of analysis and presentations of the data to show relevance of regional indicators.

Data are explored by means of a questionnaire. This questionnaire is sent to a representative in each participating country. The indicators are based on the ECHI long list. The steering group of ISARE chose 38 variables that seemed important to them for decision-making. This list comprises 17 variables used for the data collection process in all the regions of the countries. The other 11 variables are collected in a selected region for each country. From these variables, the project group established a list of 79 indicators. The questionnaire contains also three questions that allow the project team to judge the data quality:

- is the data used to analyze the regional situation
- from your point of view, is the data quality good enough to perform comparisons between the regions of your country
- from your point of view, is the data quality good enough to perform time comparisons in your regions

In order to improve the information emerging from the data collection process in each country, a complementary questionnaire was developed. The purpose of this is to describe the data collection process in each country, the difficulties encountered and the comments of those involved.

Results from the second phase show that the availability of data is generally high or very high accorded to the criteria set out. When data are available, conformity in a very large majority of cases was very high or high.

Another important outcome is that in order to be able to construct a regional database of health indicators one needs not only to call on national institutions that produce statistics, but also to be able to call on a network of regional structures. Resorting to local correspondents certainly complicates the collection of data, but seems indispensable. This allows access to data that are only available locally, and that the national institutions do not routinely collect [FNORS, 2004].

More information: http://www.isare.org.

EHEMU

"The main aim of the European Health Expectancy Monitoring Unit is to provide a central facility for the coordinated analysis and synthesis of life and health expectancies to add the quality dimension to the quantity of life lived by the European populations, provide evidence of inequalities between member states and highlight potential targets for public health strategies both nationally and at a pan-European level. Health expectancy is one of the structural indicators for the EU sustainable development policy.

Previous community actions have aimed at harmonisation of data and the European Network on Health Expectancy (REVES) has been instrumental in developing instruments in key health domains, where appropriate through consensus meetings with other EU groups. EHEMU is the next step in this process, since valid comparisons between member states require not only harmonized data but also harmonized calculations and analyses. The specific objectives of the EHEMU project are to:

- undertake analysis of health expectancies from current harmonized data
- · co-ordinate the dissemination of these results, through paper and web-based reports
- act as repository for current and past data on EU health expectancies
- undertake a regular transfer of meta-information to European databases
- develop web-based training material for interpreting and calculating health expectancies for a wide audience
- promote harmonisation of practice for future calculations in Europe

EHEMU is coordinated by the Institut National de la Santé et de la Recherche médicale (INSERM), Montpellier, France, the University of Leicester, England and the Scientific Institute of Public Health, Brussels, Belgium".

More information: http://www.iph.fgov.be/epidemio/epien/index28.htm.

Megapoles

Megapoles is a network of 15 European capital cities established in recognition that these cities face similar public health challenges. It started, like Isare, within the framework of the Health Monitoring Programme (1997-2002). The purpose of the Megapoles network is to improve health and reduce health inequalities through information exchange, comparison and co-operation between capital cities. The member cities are: Amsterdam, Athens, Berlin, Brussels, Copenhagen, Dublin, Helsinki, Lazio-Roma, Lisbon, London, Lyon, Madrid, Oslo, Stockholm and Vienna. Although not a capital city Lyon is a participant in the Megapoles network. Member cities are represented on the Megapoles network by senior politicians and health executives. Megapoles produced four publications that focus on distinctive features of health promotion in an urban context:

- Growing Older in Metropolitan Areas (2001)
- Youth and Young Families (2001)
- Socially Disadvantaged Groups (2002)
- Young People and Alcohol (2003)

In order to get comparative information, a data collection took place in 1999 (Health in Europe's Capitals). Indicators were derived from the WHO Healthy Cities project. A questionnaire with these indicators was sent to all participating cities. In addition to the actual data, cities were given some sample definitions to work from and asked to specify when local data definitions differed from this. Cities were also asked to specify the sources of data they used. Data was also taken from the DG Eurostat Regio database.

As expected there were differences between cities in the extent to which they were able to access the data available. There are two explanations given for this:

- 1. Limited availability: either the data were not available, or the contact could not easily gain access to the data. In some cases, it is likely that some cities will be able to fill some of these gaps given more time. For example, hospital admission and mortality data by cause were based on ICD9 classification and some cities only have the data in ICD10. In other cases, there appear to be quite significant gaps in our understanding of important public health variables in some cities, for example information about levels of disability or 'activities of daily living' in older people.
- 2. Indicators are just too inconsistently defined: in some cases, this is unavoidable as the definitions themselves flow from the organization of services. In other cases, there may be opportunities to improve the degree of standardization across Europe, such as in definitions of homelessness or in the assessment of high levels of alcohol consumption.

Megapoles is seeking funds for an expanded work programme. It hopes to broaden the focus of its work to three priority areas of the European Commission's health strategy. Aiming to inform, support and advance policy development in the following areas:

- reduction of alcohol-related harm (through effective policy and practice for cities)
- inequalities in access to health and preventive services
- policy integration for health (by building health into, and measuring the health impact of, wider policies).

An important recommendation of Megapoles for EURO-URHIS is: "The public health agenda recognises the breadth of factors that influence health. However, the linkage between policy decisions and subsequent health impacts is not often made. It is important that the right information on health status, in conjunction with the appropriate analytical techniques, is used in ways that inform decision making at all levels." [Bardsley, 1999]

More information: www.megapoles.com.

DG Eurostat

DG Eurostat is the statistical arm of the EC. It is a general service DG with the task producing data for the EU and promoting harmonisation of statistical methods across the member states. Two of its particularly significant roles are producing macroeconomic data which helps guide the European Central Bank in its monetary policy, and its regional data and classification (NUTS) which guide the EU's structural policies. The acronym is derived from the French name for the scheme, nomenclature des unités territoriales statistiques. The NUTS divisions do not necessarily correspond to administrative divisions within the country. There are three levels of NUTS defined, with two levels of local administrative units (LAUs) below that, historically called NUTS levels 4 and 5 and sometimes still described as such. Not all countries have every level of division. Luxembourg, for example, has only LAUs.

DG Eurostat provides some mortality and morbidity statistics, however not on a city or LAU level.

More information: http://epp.eurostat.ec.europa.eu.

The Urban Audit

The Urban Audit provides European urban statistics for 357 cities across the 27 EU member states. It was conducted at the initiative of the DG Regional Policy in cooperation with DG Eurostat and the national statistical offices. One of the main goals of The Urban Audit is to allow mayors and other locally elected officials to compare their city directly with other cities in Europe. Such comparisons can facilitate the exchange of experience and improve the quality of local urban policies. The Urban Audit builds upon the success of the Urban Audit Pilot Project (1997-2000), which demonstrated that the collection of comparable urban statistics across the EU was feasible and useful. The Urban Audit contains data for over 250 indicators across nine domains:

- · demography: age, gender and nationality, household
- · social aspects: housing, health and crime
- economic aspects: employment and income
- civic involvement: elections and local administration
- training and Education: education levels
- environment: climate, air quality, water and waste
- travel and transport: travel to work, accidents
- information society: ICT use and ICT sector
- culture and recreation: cultural activities and tourism sector

Following the evaluation of the pilot, an organizational structure of data collection had been set up. In every member state, a National Urban Audit Coordinator (NUAC) has been appointed. The NUAC's collect data from the towns and other sources in their country, validates the data and transmits it to DG Eurostat. The NUAC's get a grant for their activities. DG Eurostat is responsible for the feeding of the database and the dissemination of the data. DG Regional Policy is responsible for the publication of the results. The results are published on the website and in a paper report. Each city is described in a standard format of 2 pages with chapters on context information about the city itself and key results with diagrams. The organization itself has no scientific aim with the data. There is also no objective to present the impact of the information on urban policy. The data are free for everyone to use it for own purposes.

After the pilot, data collections took place in 2003 (258 cities) and 2006 (357 cities). The objective is to repeat the audit every 3 year. In 2004, the Urban Audit Perception Survey was created to complement the data from the main Urban Audit exercise.

Urban Audit works with four spatial levels:

1. The most important is the core city, which is normally the main political unit. To ensure that this level is directly relevant to policy makers and politicians, political boundaries were used

to define the city level. As a result, for most cities the boundary used in the Urban audit corresponds to the general perception of that city. In a few cities, the political boundary of the city is narrower (e.g. Dublin) or broader (some French cities) than the general perception.

- 2. The larger urban zone (LUZ) covers the entire metropolitan region around the city (including the core city). The LUZ allows a comparison between the city and its surroundings. The goal is to have an area from a significant share of the resident commute into the city, a concept known as the 'functional urban region'.
- 3. To analyze the disparities within cities, the cities have been divided in sub-city districts. To ensure that these districts can be compared, they had to comply with strict population thresholds: minimum 5,000 and maximum 40,000 inhabitants.
- 4. For London and Paris, the territorial level for which there is a mayor, i.e. Greater London and la Ville de Paris, does not yield comparable spatial units. Greater London has a population of 7.2 million in-habitants, whereas la Ville de Paris only has a population of 2.1 million inhabitants. To facilitate better comparison between the two largest cities in Europe and with other large cities, an additional city level was created for both cities. For London, a smaller city level, called "Inner London," was created which is roughly comparable to la Ville de Paris in terms of size.

The cities in the audit are classified according similar properties. This allows comparison that is more meaningful between cities.

The Urban Audit aims at a balanced and representative sample of cities in Europe. To obtain such a selection, a few simple rules were followed:

- approximately 20% of the national population should be covered
- all capital cities were included
- where possible, regional capitals were included
- both large (more than 250.000 inhabitants) and medium-sized cities (minimum 50.000 and maximum 250.000 inhabitants) were included
- the selected cities should be geographically dispersed within each member states

To ensure that large and medium-sized cities are equally represented in the Urban Audit, in some of the larger Member States, not all large cities could be included.

A website provides several applications for data dissemination. It is for example possible to make a city profile based on a selection of indicators across domains. Another application makes it possible to see how a city ranks within a selected group for a particular indicator. Results can be downloaded as a PDF document.

The cities in the audit use the data mainly to see what their advantages and disadvantages are. This insight is used to make considered choices in policy. The data are also useful for the Structural Funds of the EU when preparing actions in urban and metropolitan areas European Communities (2005).

More information: www.urbanaudit.org.

European Environment Agency

The European Environment Agency supports sustainable development and helps to achieve significant and measurable improvement in Europe's environment through the provision of timely, targeted, relevant and reliable information to policymaking agents and the public. Key partners of EEA include DG Environment, DG Eurostat, the WHO, the United Nations and the Organization for Economic Co-operation and Development.

The EEA established Eionet (European Environment Information and Observation Network), an expert's network of national organizations dealing with environmental informational services. A product of the EEA is a set of environmental indicators. These indicators are developed for three main purposes:

- to provide a manageable and stable basis for indicator-based reporting by the EEA
- to prioritize improvements in the quality and geographical coverage of data flows especially Eionet priority data flows
- to streamline EEA/Eionet's contributions to other European and global indicator initiatives, for example, EU structural indicators, EU sustainable development indicators and OECD environment indicators

The indicator set has been subdivided in themes. One of these themes is about the urban environment. These indicators deal with questions about:

- how much and in what proportions is agricultural, forest and other semi-natural and natural land being taken for urban and other artificial land development
- are we reducing the generation of municipal waste
- how is the problem of contaminated sites being addressed (clean-up of historical contamination and prevention of new contamination

More information: www.eea.europa.eu.

European Urban Knowledge Network

The European Urban Knowledge Network facilitates the exchange of demand-driven knowledge and experience on urban issues. EUKN aims to support policy makers and practitioners across Europe in developing effective urban policy and to promote the vitality of Europe's towns and cities. The main component of EUKN is the on-line database, the European urban e-library. It currently provides knowledge on six urban policy areas:

- social inclusion & integration
- housing
- transport & infrastructure
- urban environment
- economy, knowledge & employment
- security & crime prevention

In order to fill the e-library, each of the 15 Member States has established a National Focal Point. This is responsible for collecting relevant knowledge at national level and making it available to EUKN.

Several EU institutions and member states participate in the EUKN. Other main partners are EUROCITIES (the network of major European cities) and the URBACT Programme. URBACT is a European Commission programme that is part of the URBAN II Community Initiative. URBACT's objectives are to highlight best practices and to draw lessons from successes and weaknesses identified in these programmes. The target group is urban players from the 216 cities benefiting from the URBAN I and II programmes and Urban Pilot Projects.

More information: http://preview.eukn.org/eukn.

WHO / Europe

The World Health Organization is the United Nations specialized agency for health. It was established on 7 April 1948. WHO's objective, as set out in its Constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHOs Constitution as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. WHO is governed by 193 Member States through the World Health Assembly and this is composed of representatives from WHO Member States. The main tasks of the assembly are to approve the WHO programme and the budget for the following biennium and to decide major policy questions.

The WHO has six regional offices world-wide. The WHO Regional Office for Europe is located in Copenhagen, Denmark. The WHO European Region is made up of 53 countries: all European countries, the former Asian Soviet states plus Israel. The Office aims to support these countries in:

- developing their own health policies, health systems and public health programmes
- preventing and overcoming threats to health
- anticipating future challenges
- advocating public health

WHO Europe manages several databases with statistical content on health. The data sets are compiled from reports submitted by the member states. These databases do not offer data at the sub national level. The work of the office is supported by a number of programmes and projects. For EURO-URHIS the Healthy Cities programme, the European Observatory on Health Systems & Policies and EHIS are of particular importance.

WHO Healthy Cities programme

The Healthy Cities programme engages local governments in health development through a process of political commitment, institutional change, capacity building, partnership-based planning and innovative projects. It promotes comprehensive and systematic policy and planning with a special emphasis on health inequalities and urban poverty, the needs of vulnerable groups, participatory governance and the social, economic and environmental determinants of health. It also strives to include health considerations in economic, regeneration and urban development efforts. Over 1200 cities and towns from more than 30 countries in the WHO European Region are healthy cities. These are linked through national, regional, metropolitan and thematic Healthy Cities networks, as well as the WHO Healthy Cities network for more advanced cities. The WHO Healthy Cities programme is now in its fourth phase (2003–2008). Cities currently involved in the Phase IV Network are working on three core themes: healthy ageing, healthy urban planning and health impact assessment. In addition, all participating cities focus on the topic of physical activity/active living. Healthy Cities is a global movement. Healthy Cities networks are established in all six WHO regions.

Within this programme, a healthy city is defined by a process rather than an outcome so that it is not one that has achieved a defined health status. It is conscious of health and striving to improve it. What is required is a commitment to health and a process and structure to achieve it. A healthy city is one that is continually creating and improving the physical and social environments and expanding the community resources that enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential. WHO/Europe recommends a basic model for a healthy city that is described further under the Healthy Cities approach.

During the first phase of the Healthy Cities project, a set of 53 indicators was produced by a

working group on Indicators to assist cities in gathering appropriate data to describe health in their cities. These indicators were formally adopted by the project cities participating in the Healthy Cities project in 1990. There is no central database with urban health information.

More information: http://www.euro.who.int/healthy-cities.

European Observatory on Health Systems and Policies

The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe. The Observatory is a partnership between WHO Europe, the Governments of several member states, the Veneto Region of Italy, the European Investment Bank, the Open Society Institute, the World Bank, CRP-Santé Luxembourg, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. A component of the Observatory is the Health Policy Monitor (HPM). HPM provides up-to-date information on health policy developments in 20 industrialized countries from around the world and to enrich health policy discussions in and across countries. On its web http://www.hpm.org innovative health policy ideas or current pieces of legislation in different stages of implementation can be searched. The HPM also adds a non-European perspective surveying health policy developments

from the US, Canada, Israel, Switzerland, Australia, New Zealand, Japan, Singapore and South Korea. The HPM has been initiated and sponsored in association with the German Bertelsmann Stiftung in 2002.

More information: http://www.euro.who.int/observatory.

EHIS

The WHO Europe programme on Environment and Health Information System aims to establish a harmonized and evidence-based system to support public health and environmental policies in Europe. EHIS enables:

- monitoring the environment and health situation and its trends in the countries and evaluating the effectiveness of relevant policies
- making comparisons between the countries on the basis of relevant targets set in the European-wide action programmes
- regular reporting on environment and health to support decision-makers and also providing citizens and professionals with access to information
- exchanging information, data and knowledge as well as good practice examples benefiting public health and the environment
- the environment and health information programme assists countries in building their capacities to upgrade and operate existing national systems according to state-of-the art European practices

EHIS is developed through a series of projects. These are implemented in collaboration with several WHO member states States, DG Sanco and the European Environment Agency. In July 2004, participating countries reviewed the results of pilot study and reached an agreement on classification of indicators into three categories. Indicators that were both policy-relevant and readily available from existing international data sources with sufficient quality and comparability were recommended to the ECHI short list. When necessary, definition of indicators was adjusted to fit with the existing databases. In the end, the project produced essential guidelines regarding the definition and methodology of recommended indicators, including underlying concepts, specification of data, availability and quality of data sources, computation method and units of measurement, policy and regulatory context, interpretation and limitations, etc. At the Fourth Ministerial Conference on Environment and Health (Budapest, 2004), member states of the European Region of WHO committed to develop this comprehensive environment and health information system and its development will be reported at the Intergovernmental mid-term review meeting (IMR) to be held in 2007.

More information: www.euro.who.int/Ehindicators.

OECD

The Organization for Economic Co-operation and Development groups 30 countries (22 European) worldwide which share a commitment to democratic government and the market economy. With active relationships with some 70 other countries and economies, NGOs and civil society, it has a global reach. Best known for its publications and its statistics, its work covers economic and social issues from macroeconomics, to trade, education, development and science and innovation. The OECD plays a prominent role in fostering good governance in the public service and in corporate activity. It helps governments to ensure the responsiveness of key economic areas with sectoral monitoring. By deciphering emerging issues and identifying policies that work, it helps policy-makers adopt strategic orientations. It is well known for its individual country surveys and reviews. The OECD produces internationally agreed instruments, decisions and recommendations to promote rules of the game in areas where multilateral agreement is necessary for individual countries to make progress in a globalised economy. Sharing the benefits of growth is also crucial as shown in activities such as emerging economies, sustainable development, territorial economy and aid.

An instrument developed by the OECD is the Health at a Glance: OECD Indicators. This set provides a collection of indicators related to different aspects of the performance of health systems. The third edition of Health at a Glance (2005) focuses not only on the resources and activities of health care systems, but also includes an increased number of indicators related to health. While some basic population breakdown by sex and age are presented for a number of indicators, it does not provide in most cases a more detailed breakdown by (sub-national) region, by socio-economic group or by different ethnic/racial group.

More information: http://www.oecd.org/els/health.

3b Conclusion

This overview shows that there are many actions on public health on the European level. The described projects could be interesting for EURO-URHIS as examples to learn lessons from and/ or as (potential) collaborative partners. From the initiatives that already have been implemented, Isare, Megapoles and the Urban Audit of special interest. The aims of these three projects have many resemblances with that of EURO-URHIS and they have already reached results. Their actions show that is possible to gather comparative regional data on the European level, but also that is time consuming to shape an infrastructure for that.

The collected data in Isare and Megapoles illustrate that (health) data in regional or urban areas are often distinct from those of a whole country. This outcome shows the need for comparisons between similar areas in different countries, for example to provide evidence of effectiveness of public health strategies and a legitimacy for a project such as EURO-URHIS.

However, there are differences between regions or cities in the extent to which they are able to access the data available. Isare accentuates therefore the importance of a network of local correspondents. This allows access to data that are only available locally, and that the national institutions do not routinely collect.

The three initiatives emphasize the importance of tight and widely accepted definitions of indicators and methods. Standards could not only help to undertake international comparisons, but could also help cities to undertake their own surveys and ensuring that they are using valid and reliable measurement techniques.

The Urban Audit has published a methodological handbook. This book describes a variety of estimation methods for cases when data are only available in a sample survey, or not available according the required definitions and covering the required spatial unit. These indications could be of use to EURO-URHIS.

4 Collaborative partners

The discussed initiatives could function as collaborative partner for EURO-URHIS in three ways, namely as source for indicators and definitions, as partner for the data collection and analysing, and as partner for the dissemination and communication of results. ECHI, the Urban Audit and the Healthy Cities programme have already been helpful in describing the indicators.

For the data collection, Urban Audit deserves special attention as a potential partner. The Urban Audit has already established an urban network through the whole European Union. Their country representatives could function as representative for EURO-URHIS or advise on the optimum person(s) for collecting health data in all member states. Urban Audit has an actual functional urban region constructed for every participating city. These so called larger urban zones are also an appropriate administrative level for the exchange of health information.

The Urban Audit collects data of contributory determinants of health that are central to the interests of urban health policy makers. These include: the determinants from the enduring structures; major global and national trends and municipal determinants from the model (paragraph 2.5.2). Examples include economic aspects and determinants in the domains of travel and transport and culture and recreation. This information can help to gain better insights into the conditions that shape urban health.

Cooperation has also advantages for the Urban Audit. At the moment, there are only a few indicators on health in the audit but Urban Audit intend to reinforce this component.

The European Urban Knowledge Network and the WHO Healthy Cities programme are in particular useful for the dissemination and communication of the project results. But in a fact are all the identified organizations interesting for this purpose. Regarding a web-based information system for the distribution of data is especially the EUPHIX project of interest. The EUPHIX prototype with its expert network may be able to offer a practical approach for monitoring as well.

5. Inventory and selection of urban health indicators

At the start of the project was agreed by the steering group that the ECHI short list would be the starting point of the indicator set for EURO-URHIS. This principle is in line with the EUPH Programme. The ECHI shortlist can be seen as a list of health indicators from the perspective of a high level public health policy maker who wants to obtain a 'helicopter' or 'cockpit' view on 'the most important' issues. A main conclusion from chapter 2 was that urban health differs from public health in general by emphasis on specific themes. The work started therefore with an examination of current specific health issues in European urban areas. The objective was to come across themes that are not listed in the ECHI shortlist but seem important for the study of urban health. An initial search was conducted on the scientific literature and grey literature. Topics that are important according the WHO, DG Sanco and policy makers of the EU member states were explored (paragraph 4.1.2). Paragraph 4.1.3 gives a summary of the issues that have no or insufficient attention in the ECHI short list.

We describe the selection process and discuss which criteria have been used for the selection of indicators, the selection process for the ECHI shortlist indicators and the process for the 'extra' urban health indicators. The chapter closes with a conclusion.

5a Review of scientific and grey literature

The search started, with the help of the search webs Medline (Pubmed) and Oxford, with a scan of scientific literature. There has been searched with the headwords urban, urbanisation, city, cities, indicator, and health. Much of the hits were related to urban health in North America or the developing world. In a review of urban health topics across the world [Waelkens & Greindl, 2001] was noticed that there are striking similarities in topics and problems described in individual articles on urban health in developing and industrialised countries. A parallel conclusion could be made here. Literature concerning Europe and the rest of the developed world both deal with similar themes. Current important themes of urban health according scientific literature are:

- crime, feelings of safety
- diabetes
- drug use
- environmental issues as air-pollution, urban sprawl, population density
- green space
- health insurance
- marginalized populations as homeless people and sexual minority groups
- mental health
- migration
- noise annoyance
- nutrition (diet)
- overweight and obesity
- physical activity
- road traffic accidents
- (sexually) infectious diseases
- smokina
- socioeconomic inequalities/ social disparities

The grey literature (that which might not be formally published such as working papers, some reports and conference proceedings) also reinforced the above themes as topical subjects.

5b Review of political documents and programmes

WHO programme

The following urban health topics have special attention in the Phase IV (2003–2008) WHO Healthy Cities Network and other WHO programmes. Descriptions of the topics could be found on http://www.euro.who.int/healthy-cities/uht/20050806 1

- ageing
- air
- alcohol drinking
- children and young people
- city health development planning
- community participation
- drugs
- environmental health
- equity and health
- health care policy and planning
- health impact assessment
- housing
- mental health
- non communicable diseases
- nutrition
- physical activity
- poverty
- smoking
- social care
- socioeconomic determinants of health
- sustainable development
- transport and health
- urban governance
- urban planning
- violence

DG SANCO

DG SANCO has a number of general (not related to urban areas) priorities for the EUPH. The programme considered as important issues:

- smoking
- nutrition
- drug use
- alcohol use
- mental health
- health inequalities
- environmental health

The programme also focuses on genetic factors, however, genetic causes extend beyond the scope of public health interventions.

Member states

Because of the limited time available, a comprehensive study of (urban) health policy reports of the countries participating in EURO-URHIS was not possible. Besides, these reports are often not available in the English language. However, the Isare project has made an overview of the most important health policy issues of the EU member states. The subjects in this summary agree with the topics named in the WHO programmes. Mentioned are:

- accidents
- empowerment for healthy choices
- environmental issues
- health system performance
- healthy lifestyles in young people
- improvement of healthy years
- involvement of citizens/ patients
- main causes of ill-health and mortality
- mental health
- quality and access of care
- quality of life of elderly
- reduce health inequalities

5c Missing items in the ECHI shortlist

Issues, which have come out the literature and policy inventory, have been compared with the ECHI shortlist indicators. This match proved that some issues have no or insufficient attention in the ECHI short list from a urban health point of view. With the help of the urban health model are the following topics selected.

Damp houses

Epidemiological studies have linked substandard housing with an increased risk of chronic illness. Damp, cold, and moldy housing is associated with asthma and other chronic respiratory symptoms, even after potentially confounding factors such as income, social class, smoking, crowding, and unemployment are controlled for.

Drinking water supply/ sewerage connection

Lack of access to safe drinking water and poor sanitation still threatens the health of millions of people in the WHO European Region. This critical situation rarely hits the headlines as it is often overshadowed by water-related problems in other parts of the world. Even though most Europeans take clean water for granted nowadays, too many people are still without a regular supply of safe water. Of the roughly 877 million people in the WHO European Region, almost 140 million (16%) do not have a household connection to a drinking-water supply, 85 million (10%) do not have improved sanitation and over 41 million (5%) do not have access to a safe drinking-water supply.

Green spaces

Green spaces are less evident in urban areas than in rural areas. Green itself has a positive influence on health. Parklands and other forms of green spaces can promote healthier forms of recreation. Green spaces are less evident in urban areas than in rural areas.

Health policy

An important aim of EURO-URHIS is to support health care decision-makers with a trustworthy source of evidence health policy.

Homeless

Homeless people have a tendency to live in urban areas. They are at greater risk of many health problems and illness itself may lead to homelessness.

Migration

It is often assumes that the health of urban areas is affected with selective migration. People with poor metal health or a vulnerable personality drift towards or stay in cities because of a more anonymous way of living, whereas better-functioning people move out of the cities at a certain time. On the other hand is there a pattern of young people moving into the city and older people moving out.

Nationality/ ethnic minority groups

Ethnic minority groups have also a tendency to live in urban areas. If they are weak integrated in the society, may that lead to various problems, like poverty and deprivation. Refugees may have in addition mental problems that are related with the cause of their flight. They have also often a poor knowledge of services and procedures.

Noise exposure

A person is healthy as long as he/she can cope with the set of external influences. Exposure to noise can cause stress. This can be from different sources of e.g. high music levels, environmental noise in urban areas and major transport infrastructures.

Nutrition (diet)

Better nutrition means stronger immune systems, less illness and better health. However, the increase of inactive life-styles and high fat and sugar intake result in overweight. Therefore, obesity is a growing problem, with figures pointing to an increase from 10%

to 40 % in most European member states for both women and men.

Population density

In urban areas live more people per square kilometer than in rural areas. High population density may have positive and negative aspects on health. It can promote healthier forms of transport, like walking, cycling or public transport, because the distances between work, school and facilities are shorter. On the other hand, overcrowding can lead to infectious diseases and stress.

Safety/ crime

Urban settings have more violent crime than rural settings. This effects the health of the population direct but also indirect through stress.

Safe sexuality

Sexually transmitted infections may lead to serious morbidity and mortality. There are reasons to assume that rates of infection in urban populations are higher than in non-urban areas.

Sexual minority groups

There is a perception that lesbian, gay, bisexual, and transgender (LGBT) people are more accepted in urban areas (and thus live there more often). Still their way of life is often not accepted which would cause mental problems. Besides, this group often shows more bad health-related behaviors then their heterosexual counterparts. Indicator: Need more research.

Single parent families

Urban areas have a higher percentage of single parent families than rural areas. These families have often a low income and face (therefore) various difficulties.

5d Criteria for selection of urban health indicators

The ECHI short list indicators have no precise definitions. As reported in paragraph 2.1, the ECHI indicators are partly an inventory of generic indicators. The missing items found in the literature and policy review could be seen as generic indicators as well. The first step was therefore to find appropriate operational indicators. We did not wish to create new definitions and chose therefore to make use of definitions developed by international organisations. When no ECHI definition was found, we used a definition from the WHO, Megapoles or the Urban Audit. The operational indicators had to meet methodological criteria such as:

- validity (does the indicator measure what it is intended to measure?)
- reliability (is the measurement reproducible?)
- sensitivity (is the measurement sufficiently discriminative in space or time?)

We intended that the indicators should specify a preventable issue and aim to provide the information to local government officials that is needed for developing health prevention and intervention strategies. We wanted to prevent overlap in the aims of the indicators and to restrict the total number of indicators to 50. These criteria have been applied implicitly or explicitly throughout the selection procedure. The model and findings of the scientific and political literature has been used for all considerations for example, whether the four domains (demographic and socio-economic situation, health systems, health determinants, and health status) have been sufficiently represented.

The criteria, indicators and definitions have been discussed in work package 4 and between work packages 4, 6 and 7 and in a meeting with Mr. Pieter Kramers (member ECHI team) and Mr. Walter Devillé (member Health Systems Working Party).

5e Selection of ECHI shortlist indicators

All ECHI shortlist indicators are collected in table 2. They are classified according to the model in the first column. The second column indicates whether a valid, reliable and sensitive definition has been found. Some indicators have obtained a remark in the third column. For example when the indicator has an overlap with another indicator or when the indicator is not relevant for policy interventions on the urban level. The fourth column informs whether these indicators are regularly available or reasonably comparable on the national level. This factor has also been taken along in the decision-making but it was not a hard criterion because we also want to maintain possibilities for innovation. Besides, the availability check on the urban level is the objective of work package 7. The last column indicates whether the indicator has been selected. There are 36 from the 80 shortlist indicators selected for the Euro-URHIS indicator list.

Table 2 ECHI shortlist indicators

Demographic and socio-economic indicators

	Valid, reliable and sensitive definition available	Remark	Regularly available, reasonably comparable according ECHI	Selected
Population gender and age	Yes		Yes	Yes
Birth rate	Yes		Yes	Yes
Mothers age distribution	Yes		Yes	Yes
Population projections	Yes		Yes	Yes
Population by education	Yes		Yes	Yes
Total unemployment	Yes		Yes	Yes
Population in poverty	Yes		Yes	Yes
Fertility rate	Yes	Overlap with birth rate	Yes	No
Population by occupation	Yes	Same objective as population by education, but more difficult to measure and interpret	Yes	No

Health determinants

	Valid, reliable and sensitive definition available	Remark	Regularly available, reasonably comparable according ECHI	Selected
Regular smokers	Yes	Refined as regular cigarette smokers	Yes	Yes
Hazardous alcohol consumption	Yes		No	Yes
Intake of fruit and vegetables	Yes		Yes	Yes
Body mass index	Yes		Yes	Yes
Use of illicit drugs	Yes	Put in operation as use of cannabis	No	Yes
Social isolation	No	Combination of social isolation and support	No	Yes
PM10 exposure Total alcohol consumption	Yes	Indicator about alcohol consumption at an individual level i.e. not trade data	Yes	Yes
Blood pressure	Yes	Difficult to measure	No	No
Pregnant women smoking	Yes		No	No
Physical activity	No		No	No
Breastfeeding	No		No	No
Social support	Yes		No	No
Work-related health risks	No	Overlap with injuries workplace	No	No

Health status indicators

	Valid, reliable and sensitive definition available	Remark	Regularly available, reasonably comparable according ECHI	Selected
Life expectancy	Yes		Yes	Yes
Infant mortality	Yes		Yes	Yes
Perinatal mortality	Yes		Yes	Yes
SDR Eurostat 65 causes	Yes	No division of malignant cancer and accidents	Yes	Yes
HIV/AIDS incidence	Yes		Yes	Yes
Lung cancer incidence	Yes		Yes	Yes
Breast cancer incidence	Yes		Yes	Yes
(Low) birth weight	Yes		Yes	Yes
Injuries road traffic	Yes		Yes	Yes
Injuries workplace	Yes		Yes	Yes
Perceived general health	Yes		Yes	Yes
Prevalence of chronic illness	Yes		Yes	Yes
Limitations of usual activities	Yes		Yes	Yes
Diabetes prevalence	Yes		No	Yes
Asthma prevalence	Yes		No	Yes
COPD prevalence	Yes		No	Yes
Depression prevalence	Yes		No	Yes
Psychological distress	Yes		No	Yes
Drug-related deaths	No		No	No
Smoking-related deaths	No		No	No
Alcohol-related deaths	No		No	No
Dementia/Alzheimer prevalence	Yes	Not policy relevant	No	No
AMI incidence	Yes	Not policy relevant	No	No
Stroke incidence	Yes	Not policy relevant	No	No
Injuries: home/leisure, violence	No		No	No
Suicide attempt	No		No	No
General musculoskeletal pain	No		No	No
Limitations in physical functions	No		No	No

Health systems indicators

	Valid, reliable and sensitive definition available	Remark	Regularly available, reasonably comparable according ECHI	Selected
Breast cancer screening	Yes		Yes	Yes
Cervical cancer screening	Yes		Yes	Yes
Technologies (MRI, CT)	Yes	Only MRI	Yes	Yes
Insurance coverage	Yes		Yes	Yes
Vaccination coverage children	Yes		Yes	No
Hospital beds	No		Yes	No
Physicians employed	No		Yes	No
Nurses employed	No		Yes	No
Hospital in-patient discharges	No		Yes	No
Hospital daycases	No		Yes	No
Daycase-discharge ratio	No		Yes	No
ALOS	No		Yes	No
GP utilisation (surveys)	No		Yes	No
Surgeries (PTCA, hip replacement, cataract)	No		Yes	No
Expenditures on health	Yes	Difficult at the urban level	Yes	No
Cancer survival rates	Yes		Yes	No
Policies against ETS exposure	No		Yes	No
Mobility of professionals	No		No	No
Other outpatient visits (surveys, besides GP)	No		No	No
Equity of access	No		No	No
Medicine use	No		No	No
Waiting times elective surgeries	No		No	No
Surgical wound infections	No		No	No
Cancer treatment quality	No		No	No
Diabetes control	No		No	No
Patient mobility	No		No	No
Policies on healthy nutrition	No		No	No
Policies/ practices on lifestyles etc.	No		No	No
Integrated programmes in settings	No		No	No

5f Selection of non-ECHI shortlist indicators

For every issue, that has no or insufficient attention in the ECHI short list (the so called non-ECHI shortlist indicators), one or more operational indicators were proposed.

The criteria for these indicators was whether a valid, reliable and sensitive definition was available. The policy relevance was of course already proved. For two issues was no appropriate definition found, namely for Safety/ crime and nutrition.

Issue	Valid, reliable and sensitive definition available	Proposed operational indicator	Source			
Demographic and soc	io-economic indica	ntors				
Population density	Yes	Population per square km	WHO			
Nationality/ ethnic	Yes	Population by nationality	Urban Audit			
minority groups	100	Population by ethnicity	Megapoles			
Single parent families	Yes	Children with single-parent	ECHI long list, child project			
Marginalized populations	Yes	Estimated number of homeless people Sexual minority groups	Urban Audit Definition formulated			
Migration	Yes	Migration from nationals to city/ migration from EU nationals to city/ migration from non EU nationals to city	Urban Audit			
Health status indicato	rs					
Safe sexuality	Yes	Chlamydia prevalence	ECHI long list, Reprostat project			
Health determinants						
Green spaces	Yes	Public access to green space (e.g. Parks)	WHO			
Safety/ crime	No	-	-			
Nutrition (diet)	No	-	-			
		Noise nuisance	Urban Audit			
Hausing issues		Damp houses	ECHI long list			
Housing issues		Drinking water supply	WHO			
		Sewerage connection	Urban Audit			
Health systems indica	Health systems indicators					
Health policy	Yes	Existence of a city health education programme	WHO			

Table 3 Missing issues in the ECHI shortlist with proposed operational indicator

5g Conclusions

The selected indicators and definitions do not form the final indicator list! Criteria are subjectively and therefore always arbitrary. We are not absolutely sure that the right decisions have been made. We consider it therefore as very important that the list is tested across Europe. In work package 6, an instrument has been designed to collect information on the availability in cities of the proposed indicators. This instrument has been piloted in four European cities, to determine whether the indicators represent a useful and appropriate means of assessing urban health in Europe and whether the indicators have been clearly identified and defined. Besides has been asked whether there are indicators that we should have included or that could be removed. This preliminary indicator list has also been discussed on a conference with health specialists from different European countries.

Some of the indicators that have not been selected are, nevertheless, essential for the study of urban health, e.g. physical activity and nutrition. However the problem is that no appropriate definitions have been found for these indicators. We recommend DG SANCO (ECHIM) to initiate a project to develop definitions and phrasings for these indicators that will be useable across Europe. The development and selection of indicators is an ongoing process, and should be continued.

WP5 Definition of urban areas and populations

1. Objectives

To develop a definition of urban areas and populations across all member states taking into account accepted classifications e.g. ICD10 and EUROSTAT NUTS (nomenclature des unites territoriales pour les statistiques).

Literature and existing classifications of urban areas and populations in European countries have been analysed and a review of existing definitions of urban areas is given. Advantages and disadvantages of criteria used in different projects to selected urban areas have been shown. EUROSTAT NUTS/LAU levels have been considered and differences in NUTS classification between countries have been described. Due to the non-existence of obligatory definitions visual methods to demonstrate differences between different urban areas have not be applied.

To identify the most appropriate administrative level for the purpose of health information exchange between urban areas.

We identified different administrative levels in different Member States as most appropriate for the target of URHIS. It was not possible to select one level of the NUTS/LAU classifications in all MS.

- Compilation of cities by various definitions and projects
- Statistics agencies
- Country descriptions
- List of reviewed projects
- Literature
- ESPON-Experts

2. Introduction

Urbanization is not a new concept. With the development of human civilisation, cities emerged as a natural consequence. In fact the very elastic terms "civilization" and "civilized" come from the Latin word civis which refers to a citizen living in a city; among the ancient Greeks the greatest punishment was to be banned from a city; and the word urbs, from which we get urban, referred to the built environment of the city (Palen 2001).

In 2007, for the first time in history, the world's urban dwellers will outnumber the rural (UN-Habitat 2006). Against the background of the urbanizing world, the European Urban Health Indicator System project (EURO-URHIS) has been launched, the aim of which is the development of a comprehensive health information and knowledge system of European urban areas. Despite the importance of the phenomenon of urbanization, an internationally consistent, scientific definition of urban areas does not exist.

As a result, work package 5 (WP5) was established, the aim of which was to undertake a study to develop a definition of urban areas for the URHIS project and to identify the most appropriate administrative level to cover the defined areas. The outcome of this study will form the basis for all other work packages. The task of work package 5 was to give a review of existing definitions of urban areas developed for the purposes of demarcating an administrative boundary or for research. Nevertheless, it should be pointed out here that health reporting is also an administrative function; therefore an administrative boundary definition would also suit this purpose.

What follows is the first report on the research findings of WP5.

3. Context

The aim of URHIS is the development of a comprehensive system of health data and information that will be relevant to all members of the European Union. The focus of the project lies on urban areas. Urban areas can be quite exceptional and have a special demand on information about basic demographic and health characteristics of the city/urban area population, which may be different to that of more rural areas. These data are needed in order to identify and monitor the particular spectrum of health problems as a basis for evidence-based decision making and prioritising urban health problems against the background of restricted resources. In order to address these issues, the following questions are fundamental:

- 1. Which definitions of urban areas are in use over Europe?
- What are the characteristics of an urban area?
- Does every state define urban areas in the same way?
- Where does an urban area end?
- Is an urban area limited to administrative borders?
- 2. Which definition is best suited for the objectives of URHIS?
 - Which definition of urban areas is most appropriate with regard to urban health problems and health policies?
 - Can health authorities for the defined areas be identified?
 - Is (health) data available for the defined urban areas?
 - How many urban areas according to the definition used in URHIS are there in Europe / in each country?
 - How many urban areas should be integrated in the project?
 - Is every country represented with an equal number of urban areas?

All these questions have to be answered to enable the other work packages to perform their work. Because other work packages have different perspectives and approaches on the project, the answers must be found in agreement with all participants. The first aim of WP 5 therefore is to provide the basic facts, to describe the results and to make a proposal for the definition that can be used in URHIS. This has been done with this intermediate report. The list of urban areas however cannot be given before a consensus has been reached.

4. Methods

The methodology of our research was the collection of definitions of urban areas (and associated terms.

In a first step a review of literature and an Internet search were performed. Different search terms were used in varying combinations, e.g. "urban", "area", "definition", "health", "audit". The researched literature was categorized according the underlying structure of definitions of urban areas (see "theoretical approach").

Further on it was searched for European projects that deal(t) with the topic of urban areas. As a third way of information gathering experts of regional planning within the European states were informed about the objectives of the URHIS and asked for an overview over urban areas in their countries (Questionnaire see below). The results of the search for projects were categorized considering the different approaches to define urban areas, as from the geographical, statistical or administrative point of view (see "theoretical approach) and results of interviews, that focussed on the feasibility of different approaches, were given in the results section, "practical approach".

NAME:	
COUNTR	RY:
(1)	Which are the most important cities / towns in your country, that you would like to see in our project? (e.g. Liverpool in the United Kingdom 1.
	Could you give a short comment why you consider the cities listed above to be important for URHIS (e.g. population density, economic importance, special health problems, \dots)?
(2)	Which are the most important agglomerations (extended city or town) in your country, that you would like to see in our project? Don't mind about administrative boundaries! (e.g. Greater Manchester in the United Kingdom 1. 2. 3.
	If you know, which cities belong to the agglomerations please note them below: 1. 2. 3. Could you give a short comment why you consider the agglomerations listed above to be important for URHIS (e.g. population density, economic importance)
	special health problems)?

5. Results

Some definitions of urban area were found. These are presented as theoretical results. Many information was found on projects working with large cities or cities in general without having any strict definition. Those are presented as practical results.

5a Theoretical results

Geographical approach

Most of the definitions are related to the size (population size, surface area, size of cropped area). One of them is the geographer's point of view. Beside the number of inhabitants (absolute and by square kilometre), other factors mentioned are the urban way of life, the importance of public transport, a special structure of populations and social conditions, and the economic importance of the area.

The ESPON project analysed potentials for polycentric development in Europe (27 + 2 European counties) and identified 1595 so called Functional Urban Areas (FUAs). A FUA consists of an urban core area and the surrounding areas that are economically integrated with the centre. The FUAs have more than 20,000 inhabitants. Comparing these areas concerning population, transport, tourism, manufacturing, knowledge, and decision-making in the private and public sector there are 76 FUAs which could be called Metropolitan European Growth Area (MEGAs) according to the EPSON project.

Density of buildings approach

Linked with the geographers definition is the aspect of the density of buildings. A common definition of urban is a maximum spread between buildings of 200 m (this definition is officially used in nearly 50 countries worldwide). There are various projects identifying agglomerations by analysing aerial photographs. The problem of this approach is that the boundaries seen do not correspond to the administrative boundaries - and by that – with statistical units which allow the unproblematic collection of (health) data.

The Network on Urban Research in the European Union (NUREC - formerly Community) was founded in 1989. Thus, the project is limited to the former 15 countries of the EU. 330 agglomerations with at least 100,000 inhabitants were defined by the build-up areas and contain 8300 administrative units.

In the **GEOPOLIS** project an urban area is defined by an urbanized district in which no buildings are set more than 200 meters apart from the closest neighbouring building. In 2000 the database contained 42,000 urban areas with about 100,000 local units worldwide. There is no information about the number of units in Europe.

In the **Les Villes Européennes – Die Städte Europas** project it was decided to examine European agglomerations which are defined by their build -up areas as well (Europe = 15 countries + Switzerland and Norway). The 178 agglomerations identified by the project undergo an evaluation based on 15 indicators like population and their development, number of passengers at the airport, international trade, financial importance etc.

Statistical approach

Trying to sum up cities of European countries by inhabitants leads to the statistical definition. But the different countries vary in size and the dimensions of cities; even the capital cities vary enormously throughout the EU. Appendix IIB shows the biggest cities of each country and the number of its inhabitants.

If the biggest cities or agglomerations of Europe would be chosen as participants of URHIS, some countries will not be able to take part in the project. Therefore it is crucial that URHIS finds a definition of urban areas, which results in one or more urban areas in each Member State.

Administrative border approach

Looking on the problem from the administrative aspect, there is also no consistent definition of urban areas or cities all over Europe. Organisation varies from country to country. Spatial structure and planning are organized differently in countries. Even the UN suggests the use of individual definitions rather than to standardize them. Also the categorisation of a city as small or large or important depends partly on the region around the city.

The **Nuts / Lau Levels** classification made by Eurostat permits comparison of area units in the European countries. The boundaries are comparable with administrative units. But the classification gives no advice for selecting cities or agglomerations; furthermore there are great spreads of inhabitants on the NUTS / LAU levels between countries. For example the NUTS 2 level in Germany represents regional districts which are unimportant concerning (health) data and planning of health supply:

The present NUTS nomenclature ... subdivides the economic territory of the European Union into 89 regions at NUTS 1 level, 254 regions at NUTS 2 level and 1214 regions at NUTS 3 level. At the local level, two levels of Local Administrative Units (LAU) have been defined. The upper LAU level (LAU level 1, formerly NUTS level 4) is defined only for the following countries: Finland, Greece, Ireland, Luxembourg, Portugal and the United Kingdom. The second LAU level (formerly NUTS level 5) consists of 95 152 municipalities or equivalent units in the old 15 EU Member States (2003 situation). Despite the aim of ensuring that regions of comparable size all appear at the same NUTS level, each level still contains regions which differ greatly in terms of area, population, economic strength or administrative powers. This heterogeneity at Community level is often only the reflection of the situation existing at Member State level. http://ec.europa.eu/eurostat/ramon/nuts/mainchar_regions_en.html

Urban Audit is a promising project because it compiles national lists of cities and data as well. The area units refer to the NUTS 5 / LAU 2 level (see below) and extend to the 27 European (candidate) countries. Cities were selected not by a distinct definition but should present 20% of the countries population and evenly spread across the country.

Three spatial levels have been defined in the Urban Audit project: 1) the administrative town/city, 2) the kernel, and 3) the larger urban zones. The town/city has been defined as "administrative town/city". Typically these administrative units are responsible for the local government. In most – but not all - countries the administrative town/city concept corresponds to the LAU (local administrative unit) level2. In Belgium, France, Portugal, the United Kingdom, Ireland, Cyprus, and Malta town/cities are defined in a different way.

In addition the concept of the "administrative town/city" could not be applied to London and Paris, because the spatial units are not comparable between the two cities (London 7.2 Mio inhabitants, Paris 2.1 Mio inhabitants) and other large European cities. For this reason the additional spatial level "kernel" has been developed by the URBAN AUDIT project. The kernel of London (Inner London with 2.8 Mio inhabitants) is comparable with the administrative town/city of Paris (20 arrondissements with 2.1 Mio inhabitants) and the administrative town/city of other large European cities.

The concept of "functional urban zones" has been used as a proxy for "larger urban zones". The underlying idea was to group together NUTS level 3 or LAU level 1. It was stressed as an advantage, that the data availability (regional statistics) is relatively high. The disadvantage of this concept is the consideration of administrative (functional) zones instead of urban areas.

5b Practical approach

Some of the analysed projects turned out to be networks like metrex (Network of European Metropolitan Regions and Areas), eurocities (Network of 130 major European cities, founded in 1986) and urbact (integrated Urban Development Transnational Exchange with sub-projects, e.g. urban health). The selection of members does not follow clear criteria. Attended cities or agglomerations vary in size and are irregular dispersed across Europe. There are health related networks like 'Closing the Gap Project' on health inequalities (2004-2007), mégapoles a network of EU capital cities founded in 1997, or the WHO's 'healthy cities and urban governance' programme (with 1200 cities and towns from more than 30 countriesin the WHO European Region). None of these networks has a definition of urban (area) or limitations like a minimum number of inhabitants. The participation is voluntary. Cities that attend these networks can be found in appendix IIC.

The "practical approach" has some advantages for future approaches on the European level, when accompanied by national experts. These advantages are the guarantee that at least one or even more cities/urban areas from every countries are admitted to the project and the consideration of the specific national situation, e.g. no agglomerations in a specific country, selection of economic declining areas with corresponding health effects (see perceptions of experts below).(5,6)

5c Perception of URHIS-experts:

A questionnaire was sent to URHIS experts in EU countries. So far seven countries have responded. URHIS experts from the United Kingdom and Germany did not select the biggest cities. Instead they chose densely populated areas with an economic decline and (followed by that) enormous problems that will also effect health.

- United Kingdom: Greater Glasgow, Greater Manchester, Greater Birmingham
- Germany: Rhine-Ruhr-Area, Rhine-Main-Area

So far the United Kingdom is the only country with comparable answers from URHIS and ESPON and both experts came to nearly the same conclusion (see below).

The main approach of the Czech Republic was to select cities from all parts of the country, which nevertheless vary in number of population and from agricultural to industrial surroundings. Agglomerations are not common in the Czech Republic.

The Netherlands chose the four biggest cities, which are all part of the agglomeration of "Randstad". They are characterised by high population density, poor health conditions, disadvantaged groups etc.

Slovenia and Lithuania named the three biggest cities with the note that there are no agglomerations. Oslo and Tromso were named for Norway. All of them are chosen because of the number of inhabitants (compared with other cities in the country), availability of data and known "urban" problems.

5d Perceptions of ESPON-experts:

The same questionnaire was sent to ESPON experts in EU countries. So far experts from four countries have responded. Here again, answers from the United Kingdom were comparable to that of the URHIS-expert. The only difference was the note of London because of population density and economic importance by the ESPON-expert.

Greece named Parta, Iraklio and Larisa as important cities and Greater Athens and Thessaloniki as important agglomerations. Cities and agglomerations are characterised by population density, economic, cultural, and international importance. Health problems were not given but air pollution especially in Athens is mentioned.

For Luxembourg the decision was made in favour for Luxembourg city as capital, Esch as highly industrialised city and Nordstad. All three of them are centres of agglomerations as well. These regions are growing very fast in means of population, GDP, traffic, and air pollution.

Valletta as the capital city of Malta is currently the biggest agglomeration of the island with high crime rates and special health problems due to the ship-repairing and -building industry and traffic density.

6. Summary of Results

In summary there is no consistent definition of urban areas, which could be used as basis for URHIS. Urban areas with special urban health problems and with responsibility for health policy for the urban area are defined very differently in the Member States. To find urban areas which are well suited for URHIS, it seems to be best to rely on the categorisation made by local experts, guided by some criteria.

The following list presents the criteria that could be used for the selection of urban areas and their advantages and disadvantages. Balancing advantages and disadvantages of existing approaches in the view of feasibility the concept of urban areas as used by the Urban Audit project gives the most appropriate level for the exchange of health information between urban areas in many countries. Hence, the Urban Audit approach is recommended for a closer examination on the national level. As participation in Urban Audit was deliberate there may be countries where additional urban areas have to be identified for URHIS. Therefore additional cities or urban areas may be needed in some countries. Criteria for urban areas according to the targets of URHIS should take into account agglomeration by population size, economic importance and other mentioned criteria but they have to be linked to the country level.

idea of limitation	advantage	disadvantage
Capital cities	Clearly defined; in most countries the biggest city	Special structure because of high administrative functions
Biggest cities (two or three per country) by number of inhabitants	In most countries clearly defined	Big differences, e.g. Riga and Daugavpils in Latvia (731,762 and 110,379) in comparison with Rome and Milan in Italy (2,546,804 and 1,256,211)

Areas with a maximum spread between buildings of 200 m	Correct from the geographical and spatial point of view; used in a lot of other projects	Not necessarily identical with administrative borders / health authorities And not necessarily identical with the regions which are linked to the core city economically
Agglomerations named by URBAN AUDIT	Almost clearly defined, with data available	Based on the cities which are part of URBAN AUDIT which are not necessarily the biggest ones of the country
Common national agglomerations (like Rhine-Ruhr-Area, Randstad,)	Prominent areas with historical, economical background Interesting in terms of health needs	Do not always have central administration / health authorities
NUTS / LAU	Clearly defined	Big differences in number of inhabitants and areas; do not have necessarily health authorities. Administrative functions of levels differ between countries
Urban areas named by analytical projects	Have been used before; identical with administrative borders	Agglomerations and cities are mixed up

7. Recommendations

Based on the summarised results some key decisions have to be made to define the criteria for the selection of those urban areas that will be asked to participate in URHIS.

First: It is important that all EU member states (plus Norway and some accession states) will get the opportunity to be represented in URHIS.

This means that theoretical definitions of urban areas, e. g. number of inhabitants, population density or housing density can not be used in identical form in all Member States, because such definitions would lead to a selection of urban areas which would probably be situated in only some of the member states.

Therefore the selection process should guarantee that at least one urban area per member state (incl. Norway) is admitted to the project.

For this reason the "practical approach" should be considered to select urban areas besides the Urban Audit definitions. (5,6)

Second: How many participating urban areas are wanted in URHIS and how many of them URHIS is able to work with?

Two or three urban areas per country is the maximum number which should be considered for the questionnaire. For detailed studies some out of these areas can be chosen.

Third: The URHIS study group has to decide whether the project will work on cities defined by administrative boundaries or on agglomerations which may comprise either more than one city or one city and the adjacent regions which are influenced by the city. In this case it may still happen that some of the areas are cities because there are no agglomerations in a country, as stated in the questionnaire from Lithuania.

The more interesting but also more challenging approach is to work with agglomerations. Data availability will be better for cities and health authorities may not exist for agglomerations but URHIS should take the chance to start some developments.

7a Proposal based on these decisions

One way to get participants for URHIS would be to ask the capital cities and the two largest cities (in terms of inhabitants) of each country. This would make selection of areas and identification of partners easy but would probably not achieve new results.

Thus, it is recommended to look at the agglomerations of countries; areas that are characterised by a high density of population and in most cases by great problems based on their economic history. A weakness of this approach is that problems might occur in finding health authorities and data for these areas. The strength however is that fewer differences in structure are expected by comparing agglomerations than cities. Furthermore it can be assumed that the particular structure of agglomerations with its interactions between centre and conurbation will lead to similar demands on health information.

If available, two or three agglomerations per country should be selected. If no agglomerations exist in a country the largest cities can be selected instead. Proposals from URHIS or ESPON experts should be used to lay stress on agglomerations and alternatively the proposed cities. For countries without recommendations from local experts either urban areas can be selected by URHIS based on their knowledge of the country, or the decision can be postponed until relevant questions have been asked and answered.

From the results so far, a list of agglomerations/cities compiled for the EU countries is given in the box below:

country	agglomeration or city				
Czech Republic	Liberec (agglomeration				
	Pilzen (agglomeration)				
Germany	Rhine-Ruhr-Area				
	Rhine-Main-Area				
Greece	Athens (metropolitan area)				
	Thessaloniki				
Lithuania	Vilnius				
	Kaunas				
Luxembourg	Region Centre Sud				
	Region Sud				
Malta	Valletta (agglomeration)				
Netherlands	Randstad				
Norway	Greater Oslo				
	Tromso				
Slovenia	Ljubljana				
	Maribor				
United Kingdom	Greater Glasgow				
	Greater Manchester				

7b Decision of the URHIS steering group:

Based on the work of WP5 a discussion on the definition of urban areas in the URHS project took place at a steering group meeting and at a meeting of all partners at the end of April 2007 in Athens. The following decisions were made:

 Each country of the EU, Norway and some accession states should be part of the project and select some urban areas. The number of urban areas depends on the number of inhabitants of the countries (see list below).

- 2. The selection of urban areas in each country is made by the person who represents the country in URHIS. The criteria for the selection should comprise the relative size of the urban area in the country, the fact, that "urban health problems are found" and the availability of a person who can be approached with the questionnaire. It is not necessary that there is a common health administration.
- 3. It is up to the partners in the countries if they propose cities or agglomerations. A universal definition for all countries is impossible to give because agglomerations do not exist equally often in the countries and the political importance of agglomerations is different between the countries.

Conurbation Selection

The number of conurbations to be selected per country is dependent on population size.

- 1 city in Member States with < 5 million people (9),
- 2 cities in Member States with 5 20 million people (12),
- 3 cities in Member States with 20 60 million people (4),
- 4 cities in Member States with > 60 million people (4).

One City Conurbation should be selected in:

Croatia
Cyprus
Estonia
Ireland
Luxembourg
Malta
Norway
Latvia
Slovenia

Two City Conurbations should be selected in:

Austria
Belgium
Bulgaria
Czech Republic
Denmark
Finland
Greece
Hungary
Netherlands
Portugal
Slovakia
Sweden

Three city conurbations should be selected in:

- ltaly
- Poland
- Romania
- Spain

Four city conurbations should be selected in:

- France
- Germany
- United Kingdom
- Turkey

62 city conurbations will be studied overall (in 27 EU member states + Norway, Turkey and Croatia)

WP6 Questionnaire Development

1. Introduction

The objective of WP6 was to use the information resulting from Work Packages 4 and 5 (WP4 and WP5) to develop an instrument to collect information on member state's current use of measures of urban health. The resulting instrument would be used to assess what urban health data are currently being collected in urban areas across Europe, and equally importantly, identify which urban health data are not currently being collected.

This is linked to Specific Objective 2 for the Euro-URHIS Project,

'To summarize individual member states' current use of measures of urban health, in order to compile a cross-EU inventory, which will allow transnational comparisons and benchmarking' (Euro-URHIS, Annex 1:3).

2. List of partners involved

- Jude Robinson, University of Liverpool, UK. (WP6 Leader)
- Kaspar Bams, GG&GD Utrecht, the Netherlands
- Lesley Patterson, University of Manchester, UK
- Erik van Ameijden, GG&GD Utrecht, the Netherlands
- Roger Harrison, University of Manchester, UK

Thanks also to Ifeoma Onyia, Chris Birt and Angela Pilkington (Sefton PCT, UK), Arpana Verma and Dick Heller (University of Manchester, UK), and Wolfgang Hellmeier (Germany).

3. The Development of the data collection instrument

From November to March the data collection instrument was developed by Jude Robinson (UK) and Roger Harrison (UK), working closely with Erik van Ameijdan (The Netherlands) and Kaspar Bams (The Netherlands) from Work Package 4 (WP4). Contact was also made with Wolfgang Hellmeier (Germany) from Work Package 5 (WP5) to keep up to date with the developing definition of what constituted an 'urban area' in Europe. Expert advice on the selection of particular health indicators for the draft data collection instrument was also sought from Pieter Kramers (ECHIM, The Netherlands). In accordance with the Description of Work for this work package, the indicators selected for inclusion in the draft data collection instrument, the Euro-URHIS City 55, were drawn from other projects developing health indicators, and used the ECHI health indicator framework.

4. Piloting the DRAFT data collection instrument Euro-URHIS City 55

In March 2007 a pilot was undertaken of the draft list of health indicators, Euro-URHIS 55, with partners in four EU countries: Greece; UK; the Netherlands; and Germany. Key contacts in each of the four countries were sent electronic copies of the list of health indicators, and an electronic 'fit for purpose form' to use to assess the questionnaire. The primary objective was to test whether the instrument was 'fit for purpose' for use across all European States. Detailed responses were received from respondents all four countries.

As the four countries included in the pilot were all established EU member states, with three member countries (Germany, Netherlands and the UK) having developed systems of data collection, the pilot was extended to elicit comments from all project partners, to include those partners from new and potential EU member states, including Romania and Turkey. In April 2007, further comments on the urban health indicators included in the Euro-URHIS City 55 were sought during a series of specific and directed workshops at the Euro-URHIS All Partner's Meeting in Athens. Further additional comments were sought electronically via a request to all partners on the Euro-URHIS project electronic List serve. All respondents were requested to send comments

by the end of April 2007, although suggestions and comments were accepted into the first few weeks of May 2007. By establishing a wide consultation process during the pilot phase, WP6 sought to identify issues relevant to member states that may not yet have developed methods of collecting health data in urban areas.

5. Responding to the results of the pilot.

During May 2007, Jude Robinson (UK), with advice and assistance from Kaspar Bams (The Netherlands), worked on the following tasks in the light of the feedback from the pilot on the Euro-URHIS City 55 to ensure face, content and criterion validity of the final version of the data collection instrument, by:

- Reviewing whether each of the indicators represented a indicator of urban health
- Reviewing whether the total number of indicators could be reduced
- Considering alternative suggestions for the inclusion of other health topics and indicators
- Exploring suggested changes to the wording of the indicators and their descriptions, particularly the use of colloquial or idiomatic words and phrases
- Considering alternative methods of calculating the outcome or exposure data
- Reviewing whether the suggested age ranges within each of the indicators were appropriate, and whether they could be altered to appear more standardised
- Considering whether there were any specific issues or potential problems relating to new EU member states and Turkey

6. Results of the pilot

6a Developing the list of indicators

Attempts to further reduce the total number of indicators in line with suggestions by the majority of participants in the pilot were complicated by the lack of agreement between participants as to which indicators should be included or excluded from the final version. Furthermore, over 19 new topic areas were suggested for inclusion.

Guided by the suggestion that we should reduce the number of indicators to as few as possible, the total number of indicators was reduced from 55 to 45 health indicators: 12 of the piloted health indicators were excluded as not relevant to urban health; 2 (new) suggested topic areas from the pilot were matched to existing definitions of health indicators and included; and one existing indicator was significantly re-worded. The revised data collection instrument was renamed; The Euro-URHIS 45, and a new term was developed to describe the health indicators, Urban Health Indicators (UHIs).

Ten topic areas that were regarded as potentially important indicators of health in urban areas, but could not be matched to existing health indicator definitions that could be applied across Europe, were included on a 'wish list' as part of the data collection instrument. As 45 indicators still represented a relatively long list, it was decided to include a summary of all 45 indicators as part of the data collection instrument. Following discussions with Chris Birt, Ifeoma Onyia and Angela Pilkington from Work Package 7 (WP7), and the results of the WP7 Workshop held at the Euro-URHIS All Partners Meeting in Athens, April 2007, the term Euro-URHIS urban area, was adopted by WP6 to describe the geographical/ administrative and/ or political area in each country where the questionnaire would be applied. This term has been accepted by WP7 and used to describe urban areas.

Participants in the pilot noted that the population age bands (e.g. 5-14, 15- 19 years) included in the definitions for each of the UHIs were not consistent throughout the document, and noted some ambiguous wording for the definitions of certain UHIs. In response some age bands have been standardized and indicator definitions re-worded. However, working in close consultation with Kaspar Bams (WP4), it was decided to retain the distinctive wording and age bands for some UHIs, as it is the stated aim of the project to use existing and validated health indicators from ECHIM and some from WHO Healthy Cities and standardizing the age bands, and/or changing the definition would effectively change the UHIs. However this issue has been noted, and close attention will be paid to the results of WP7 to develop proposals to see how age stratification can be further standardized.

6b Developing the questions for each UHI

Participants in the pilot made a number of suggestions about what questions the data collection instrument should include. This amounted to a long list of over 15 questions, such as what data were collected, who was it collected by, and what was it used for? Many of these suggestions were made during the course of the All Partners Meeting at Athens, and a record was kept of all of the suggestions made. However the desire to accommodate all of the questions had to balanced against other considerations, as participants at the meeting, and from the four-country pilot had expressed concerns that the form used in the pilot was too long, and would be too time consuming for partners taking part in WP7 (Data Collection) to fill in. As a result, the list of questions was substantially reduced during May 2007, to 4 questions, with one question with four sub-questions, bringing the total to 7 questions. The development of this final list of questions was made in consultation with partners from WP4, WP7 and WP9.

7. The final data collection instrument: Euro-URHIS 45

7a The structure of the final data collection instrument

The data collection instrument Euro-URHIS 45 consists of 3 parts, which are currently available on the Euro-URHIS website at the links below as password protected form and as PDF

- Part I- List of the Euro-URHIS 45 Urban Health Indicators (UHIs)
- Part II– The Euro-URHIS 45 Questionnaire
- Part III The Euro-URHIS 'Wish list'

7b Overview of Euro-URHIS 45

See website http://www.urhis.eu/word/Overview%20of%20Euro-URHIS%2045.doc

This document was developed to provide an introduction to the three parts of the data collection instrument, the Euro-URHIS 45. It also provides a link to websites that may assist the completion of the Euro-URHIS 45. From the results of the pilot, the WP6 team became aware that many partners in European countries would find it difficult to provide all of the information requested. The document Overview of Euro-URHIS 45 contains information that makes it clear that we (the Euro-URHIS project team members) are aware that potential respondents may find it hard to complete all of the requested fields, and that we will accept partially completed forms if necessary.

This document also has a table where we invite anyone who has provided information that has assisted in the completion of the Euro-URHIS 45 in each of the different Euro-URHIS areas across Europe, to state their job title and the name of the organization for which they work. This will aid our understanding of who has knowledge and access to health information data within Europe. This form is available in a password protected electronic version and will be sent out with the Euro-URHIS 45.

7c Part I – List of the Euro-URHIS 45 Urban Health Indicators (UHIs)

See website http://www.urhis.eu/word/Overview%20of%20Euro-URHIS%2045.doc

This is a summary list of each of the 45 selected UHIs to act as a useful reference point, and to assist completion of the Euro-URHIS 45 Questionnaire.

7d Part II - The Euro-URHIS 45 Questionnaire

See website http://www.urhis.eu/word/Part%20II%20-%20Euro-Urhis%2045%20Questionnaire%20PWP.doc

This is an electronic version of the main data collection form, and includes the name of each of the 45 Urban Health Indicators (UHIs), a definition, and then four questions relating to: (i) the appropriateness of the definition and method of calculation; (ii) which areas the data are collected

for; (iii) links to postcode data; and methods and timing of data collection, and where the data may be found. Following the Description of Work for WP6, it is a structured questionnaire, and provides space for respondents to describe examples of both exposure and outcome data, and to refer to any national, regional, or local publications, including websites, where these data may be available.

7e Part III - The Euro-URHIS 'Wish list'

See website http://www.urhis.eu/word/Part%20III%20-%20Euro-Urhis%20Wish%20List%20PWP.doc

This includes a list of 10 indicators, which we are considering adding to the current list of UHIs as part of the Euro-URHIS project, but are not yet defined in a way that could be used to collect information across states within Europe. Here we are asking respondents if they are already collection data on these topics, and how they are defining them. There is also a dedicated section for respondents to suggest any additional urban health indicators that might be useful to develop our understanding of health in urban areas.

8. Proposed administration of the questionnaire

The 3 parts of the data collection instrument Euro-URHIS 45 are currently available electronically as password protected forms and a PDF file. From discussions with team members from WP7, these will be emailed out to partners within Europe. The Overview of the Euro-URHIS 45 will be sent out at the same time, with an accompanying email directing potential respondents to read this document first. All documents have now been sent to partners in WP7 and WP8. It is likely that there will be a number of issues that emerge during the administration of the questionnaire in all EU member states, and in discussion with WP4, WP5, WP7 and WP8, potential risks and obstacles have been identified to enable WP7 to anticipate certain issues and resolve them as promptly and easily as possible. For example, we anticipate that the translation of ECHIM health indicators into other languages may vary from urban area to urban area within the same country, and so attention has been paid to the specific wording of the indicators, and respondents have been encouraged to mention any variations in the actual wording of the definitions so that this can be monitored by the project team.

9. Deliverables

In addition to the development of the data collection instrument, the team from Work Package 6 have contributed to Newsletters (D4, D7).

10. Further Work

The team from WP6 continued to provide any advice and support needed to administer the questionnaire during WP7, and in the preparation of the summary reports (Work Package 8). WP6 was also involved in the presentation of the urban health database in month 24 of the project (D14), and the presentation of user-friendly reports for health information experts (D15).

WP7 Data Collection

Executive Summary

1. Objectives

Work package 7 (WP7) met its stated objective to:

Collect information on individual member states` current use of measures of urban health, in order to compile a cross-EU inventory, which will allow transnational comparisons and benchmarking

This was achieved by consulting expert informants in member states to collect information for individual member states using the questionnaire developed as part of WP6.

Identification of the actual area for investigation and the collaborators to complete the questionnaire in each area were important preliminary steps. Selected metropolitan area (or conurbations) were precisely defined and then referred to as Euro-Urhis Urban Areas (EUA). Each had to be identified in collaboration with associate and collaborative partners. The resultant EUAs have been recorded according to a simple coding system.

2. Results

The total data collection period ran from mid April 2007 to mid December 2007. Questionnaires have been retrieved from 60 EUAs in 30 countries. The responses to the questionnaires have now been transferred to a database, which would provide the basis for the work of WPs 8 and 10.

Initial observations of the returned questionnaires have illustrated a large variability in the extent of detail included. While 60 Questionnaires were returned from 30 countries only 21 countries returned Part III of the questionnaire. It appears that Part III of the document was less important than the main questionnaire (Part II) to many partners.

A workshop was arranged in Helsinki, taking place after the third steering group meeting on the 1st and 2nd October. The workshop consisted of an overview of work completed so far in work packages 6, 7 and 8. Partners discussed the data collection phase of the project and the issues experienced by work package leaders were summarised. This was found to be extremely productive and will prove to be useful when developing further stages of the project.

Full report

1. Introduction

The original objectives for this work package (WP) were:

To collect information on individual member states` current use of measures of urban health, in order to compile a cross-EU inventory, which will allow transnational comparisons and benchmarking. Expert informants in member states will collect information for individual member states using a specially developed questionnaire.

Accordingly, the work package was devoted to the collection of information from cities across Europe on the availability of data relevant to the proposed EURO-URHIS urban health indicators. This itself, and the questionnaire upon which it is based, were constructed within WP 6. All aspects

of the work were discussed with all associate partners and approved by the Steering Group. The total data collection period began in mid April 2007, completing in mid December 2007.

Angela Pilkington was employed to work on WP 7 tasks as follows:

- to identify the conurbations or metropolitan areas (MA) to be surveyed for availability of relevant data
- to identify collaborators to work with us to complete the questionnaire in each such MA
- to identify the precise definition of areas to be included within these MAs
- to send the questionnaire to the identified partners and collaborators, and to assist them in completion of the questionnaire
- to establish a database, on which responses to the questionnaire would be recorded
- to transfer responses on the questionnaires to this database, which would provide the basis for the work of WPs 8 and 10

2. Identification of Metropolitan Areas (MA) for investigation

Following the review of definitions of "urbanicity" in WP 5, it had been hoped that The Urban Audit would provide the basis for definition of the MAs we planned as the subjects for our study into the availability of urban health data. The Urban Audit is a project, which currently collects information on demography, society, the economy, the environment, transport and leisure, in 258 cities across 27 European countries. The basis of Urban Audit's city selection is that it should represent 20% of the countries population, applying NUTS 5 (Nomenclature of Territorial Units for Statistics) and LAU2 Level (Local Administrative Units) coding, which are internationally recognised systems.

Application of this worked appropriately in some parts of Europe, but resulted in major anomalies in others, for example including small rural areas whilst excluding larger cities and towns. The Urban Audit definition for Greater Birmingham excluded much of the Black Country, including Wolverhampton whilst including rural villages in Worcestershire and Staffordshire. Also the Urban Audit selection for Valletta in Malta included the entire island rather than just the urban area of the MA and its surroundings. Partners were therefore asked to define the MAs using the following three-step approach:

- 1. Identify the "natural" boundaries of MAs (essentially where countryside ended and residential or commercial areas began).
- 2. Identify local government boundaries, or other official boundaries used for routine data collection purposes, which approximate as closely as possible to the above.
- 3. List the smaller administrative areas contained within the larger MA boundary.

This approach has appeared to be generally applicable without too much difficulty, and no great problems in its application have been reported. In the majority of MAs this has resulted in new definitions though in some cases application of the definition did matched Urban Audit.

- All partners agreed to identify MAs for study as follows:
- Member states with up to 5,000,000 inhabitants: 1 MA,
- member states with up to 10,000,000 inhabitants: 2 MAs,
- member states with up to 30,000,000 inhabitants: 3 MAs,
- member states with up to 60,000,000 inhabitants: 4 MAs, and
- member states with over 60,000,000 inhabitants: 5 MAs.

2a Euro-URHIS Urban Areas

Selected MAs were referred to as Euro-URHIS Urban Areas (EUA) and were identified in collaboration with associate and collaborative partners in all EU Member States except Luxembourg, in Candidate EU countries Croatia, Turkey and Macedonia and in EEA states of Iceland and Norway.

The resultant EUAs have been recorded according to a simple coding system including the international code for the country and alphabetically assigned letters for the selected urban areas creating the EUA code. The smaller administrative areas contained within the EUA were then listed and assigned by number creating a EUA2_Code. This methodology was applied universally except in the case of Cardiff. In the case of Cardiff, the Euro-Urhis Urban Area had been formed from Lower Super Output Areas (LSOA), a lower level geographic coding system designed to improve the reporting of small area statistics in England and Wales. Thereby creating an even more detailed account of the area included in the EUA.

3 Retrieval of questionnaires

Once the Euro-Urhis Urban Areas were identified the questionnaire was sent to partners in all participating countries. We were originally aiming for completed questionnaires from 64 Euro-Urhis Urban Areas.

Questionnaires have been retrieved from 60 EUAs in 30 countries. We have however had issues in retrieving information from a number of countries including:

- **Denmark:** has so far completed only one of two expected questionnaires, Work Package 8 Leader, Heidi Lyshol for WP8 will follow up.
- **Finland:** suffered with the late recruitment of these partners. Despite this we have been successful in retrieving a questionnaire for Helsinki, one of two questionnaires requested.
- **Germany:** We have received three of four questionnaires. We have been unable to secure a questionnaire from Essen.
- Portugal: Despite numerous attempts, we have been unsuccessful in retrieving either of the two questionnaires requested.

4. Initial Analysis

Data was originally collated in Microsoft Excel in order to match with the formatting of the summary reports created in work package 8. However, it was also seen as important to store the data by indicator to allow for easy manipulation for analysis in work package 10. As a result the data was then re-inputted into an Access database.

Initial observations of the returned questionnaires have illustrated a large variability in the extent of detail included. Where large gaps in the data set have been obvious, partners were followed up by Angela Pilkington and workpackage 8 leader Heidi Lyshol with reasonable success. Despite 60 Questionnaires being returned from 30 countries only 21 countries returned Part III of the questionnaire. Part III was a 'wish list', asking for information and opinions on the relevance of 10 indicators, which were not previously considered in the Euro-Urhis 45. In some cases contributors were able to return this document for every EUA identified for their country. Again follow up was attempted in order to retrieve missing documents. However, it was seen by many partners that Part III of the document was less important than the main questionnaire (Part II).

5. Work Package 7 Workshop

A workshop was arranged in Helsinki, taking place after the third steering group meeting on the 1st and 2nd October. Its aim was to address problems identified through the completion of the questionnaire and to allow the discussion of possible solutions.

In attendance of this meeting were partners:

- Estonia Ene Palo
- Finland Patrik Bostrom and Antti Uutela
- Latvia Jolanta Skrule
- Lithuania Jurate Klumbiene
- Netherlands Kaspar Bams
- Ireland Anne Drummond

- Denmark- Niels Rasmussen
- Slovakia- Iveta Rajnicova
- Romania Ioan Bocsan
- Spain Angela Blanco
- Germany Juergen BreckenKamp
- Norway Heidi Lyshol
- Manchester Dick Heller
- Sweden Anette Levander
- Poland Michal Bedlicki
- NWBHO Tina Blain
- Liverpool Chris Birt
- Liverpool Angela Pilkington
- Liverpool Ifeoma Onyia

The workshop consisted of an overview of work completed so far in work packages 6 and 7, with Heidi Lyshol providing a summary of work package 8. This allowed the issues experienced by work package leaders to be summarised. Partners were then asked to create a 15-minute presentation of their experiences in the data collection phase of the project.

Common issues included the pragmatic selection and definition of the Euro-URHIS Urban Areas, reinforcing the problems related to the use of Urban Audit definitions. The completion of the questionnaire was found to be a lengthy process, taking over 4 months in some cases. This was thought to be as a result of the size of the questionnaire and the spread of data amongst numerous organisations that had to be contacted. In some cases data was split between up to 30 organisations. The format of the questionnaire made it impossible to divide the questions between these relevant organisations. Partners also found data collection in the summer period difficult, due to annual leave taken at this time. The late recruitment of some partners, as a result of drop out and lack of project interest also caused issues in organising time for the project amongst other work commitments. Issues regarding the poor clarity of some indicator definitions were highlighted.

The possibility for future collection of data itself was also discussed. This would require the formal involvement of relevant institutions and a minimum of 6 months for actual data collection. Experience in the collection of data in the current project differed across countries. Some member states reported little engagement by country officials; which could delay data availability in future collections. A long-term project would require this involvement; though one coordinating participant could still manage a one off collection. This could create problems regarding time, involving personnel from various organisations and financial costs. It was widely agreed that translation of the data collection form was not required. Most countries successfully completed the questionnaire in English without difficulty. It was proposed that regular lifestyle surveys would be required in order to fill gaps in the data set across all of the Euro-URHIS area. There was some support of this if it was under a municipal wide or national banner. The data collection form itself should also be made user-friendlier for future data collection, including the development of more flexible electronic versions.

The workshop was found to be extremely productive and will prove to be useful when developing further stages of the project.

6. Conclusion

Workpackage 7 has been carried out with a reasonable degree of success. Workpackage 8 has now taken over in terms of following up partners for further detail and clarification of questionnaire responses. The database itself will now be passed on for analysis in workpackage 10.

WP8 - Country Summary Reports

1. Objectives

To collate data and use to develop country summary reports describing the current use of measures of the urban health for participating member states and to compile a cross-EU inventory, which compares countries and identifies common activity areas.

The 45-point Euro-URHIS questionnaire (see Project website at: http://www.urhis.eu/word/Part%20II%20-%20 http://www.urhis.eu/word/Part%20II%20-%20 http://www.urhis.eu/word/Part%20II%20Questionnaire http://www.urhis.eu/word/Part%20II%20Questionnaire http://www.urhis.eu/word/Part%20PWP.doc http://www.urhis.eu/word/Part%20PWP.doc <a href="mailto:Euro-Urhis%2045%20Questionnaire%2045%20Questionnaire%20Questionnaire%2

The number of Urban Areas selected per country varied – from one UA in the countries with the smallest population to four in the most highly populated countries, such as Turkey or the UK. Some UAs, originally selected for participation, chose not to participate at all; a very few UAs filled in their forms rather haphazardly or incompletely – but the large majority of Urban Areas delivered questionnaires of near 100 pages filled with invaluable information about local health indicator availability, definitions and sources. The local respondents were painstaking, conscientious and hard-working, and were not paid by the project for all the hours of hard work our questionnaires cost them. They should be thanked.

This report attempts to sum up the information of those 60 questionnaires, near 6000 pages of information – a better way to perceive the information at a glance would be to look at the spreadsheet1 on the project website at: http://www.urhis.eu/excel/WP8%20Indicator%20Overview.xls Please note that the full definitions are on the questionnaire, not the spreadsheet.

It became clear that there were some issues concerning the questionnaire. Many correspondents wrote comments on their interpretation of the questions, and we tried to adjust coding according to the intentions of the questionnaire. The respondents were then asked for clarifications. It is still likely that there remain some errors in the information about the availability of health indicators, particularly in cases where the respondents were less than fluent in English.

The report still shows that an amazing variety of comparable health indicators are available in the 30 countries.

2. Patterns in Data Availability

When WP8 started working on this mass of information, it was believed that there might be patterns in data availability. We tried to group the UAs by

- Size of city
- Size of country
- North, South, East, West
- Pre- and Post-2006 EU, Non-EU

No clear patterns emerged - indicator availability does not seem to depend on size, location or EU status.

3. Common Activity Areas

This table shows how many UAs collect data on a specific subject according to, respectively, the URHIS definition and another definition. Note that the "real" numbers may be higher, depending on what the reply "don't know" means to the respondants: It is not known whether such an indicator exists, or the informant doesn't know the local definition – which may turn out to be the URHIS definition.

For definitions and full names of indicators, please see the questionnaire.

^{1.} Printing is not recommended! The spreadsheet is colour-coded, using both numbers and colours to describe data availability.

Subject of Indicator	Urban Areas	Subject of Indicator	Urban Areas	Subject of Indicator	Urban Areas
Population	1	Birth weight	15	Smokers	31
Available by URHIS definition	53 UAs	Available by URHIS definition	50	Available by URHIS definition	26
Available by other definition	6 UAs	Available by other definition	3	Available by other definition	26
Nationality	2	Mother's age	16	Alcohol	32
Available by URHIS definition	44	Available by URHIS definition	44	Available by URHIS definition	14
Available by other definition	13	Available by other definition	13	Available by other definition	34
Birth rate	3	Causes of death	17	Cannabis	33
Available by URHIS definition	56	Available by URHIS definition	47	Available by URHIS definition	21
Available by other definition	3	Available by other definition	10	Available by other definition	14
Population projections	4	Chronic illness	18	Breastfeeding	34
Available by URHIS definition	30	Available by URHIS definition	16	Available by URHIS definition	5
Available by other definition	17	Available by other definition	23	Available by other definition	34
Population density	5	HIV/AIDS	19	Fruit/vegetables	35
Available by URHIS definition	58	Available by URHIS definition	49	Available by URHIS definition	4
Available by other definition	1	Available by other definition	3	Available by other definition	28
Migration nat.	6A	Lung cancer	20	ВМІ	36
Available by URHIS definition	27	Available by URHIS definition	41	Available by URHIS definition	38
Available by other definition	23	Available by other definition	4	Available by other definition	8
Migration EU	6B	Breast cancer	21	Green space	37
Available by URHIS definition	20	Available by URHIS definition	45	Available by URHIS definition	24
Available by other definition	20	Available by other definition	0	Available by other definition	5
Migration nonEU	6C	Diabetes	22	PM10	38
Available by URHIS definition	20	Available by URHIS definition	34	Available by URHIS definition	19
Available by other definition	23	Available by other definition	14	Available by other definition	16
Household	7	Asthma	23	Noise	39
Available by URHIS definition	26	Available by URHIS definition	18	Available by URHIS definition	6
Available by other definition	25	Available by other definition	25	Available by other definition	11
Education	8	COPD	24	Damp housing	40
Available by URHIS definition	37	Available by URHIS definition	15	Available by URHIS definition	7
Available by other definition	17	Available by other definition	23	Available by other definition	8
Unemployment	9	General health	25	Vaccination	41
Available by URHIS definition	24	Available by URHIS definition	39	Available by URHIS definition	30
Available by other definition	27	Available by other definition	8	Available by other definition	24
Poverty	10	Depression	26	Breast screening	42
Available by URHIS definition	38	Available by URHIS definition	3	Available by URHIS definition	6
Available by other definition	10	Available by other definition	16	Available by other definition	31
Homeless	11	Psychological distress	27	Cervix screening	43
Available by URHIS definition	1	Available by URHIS definition	10	Available by URHIS definition	10
Available by other definition	19	Available by other definition	20	Available by other definition	18
Life expectancy	12	Limited activity	28	Insurance	44
Available by URHIS definition	53	Available by URHIS definition	16	Available by URHIS definition	33
Available by other definition	4	Available by other definition	23	Available by other definition	17
Infant mortality	13	Traffic injuries	29	Programmes (Health	45
Available by URHIS definition	54	Available by URHIS definition	10	Education	07
Available by other definition	4	Available by other definition	44	Available by URHIS definition	27
Perinatal mortality	14	Work injuries	30	Available by other definition	2
Available by URHIS definition	38	Available by URHIS definition	20		
Available by other definition	13	Available by other definition	24		

4. Austria - Graz and Vienna

On the whole, a lot of health indicators are available for the two Austrian Urban Areas Graz and Vienna. Some indicators, concerning migration patterns, poverty, HIV/AIDS and fruit and vegetable consumption, is only available for Vienna, since these indicators are collected (or, regarding HIV, estimated) on the Länder-level. None of the UAs collect any information on damp housing.

4a. Definitions

Indicators are frequently available on a more detailed level (exemplified by Q 18, on chronic illness, where informants report that the respondents are given a list of possible illnesses to choose from, not just a general question about whether they suffer from any chronic illnesses, or Q 34, where data on breastfeeding is available at many more points in time than the two asked for by the data collection form.)

4b. Geography

Indicators are not linked to postcode area, but frequently linked to districts/boroughs/communities (17 in Graz, 23 in Vienna), particularly data from Austria's 2001 census. Data seems to be collected by many different agencies, which means that indicators may be available for the city of Graz, the Urban Area, as defined in the project, or occasionally for the Greater region of Graz, which may correspond with the NUTS-3 definition, as well as on Länder-level (Styria for Graz, Vienna is also defined as a Land in itself).

4c. Data sources

The main data sources for the EURO-URHIS indicators are Statistics Austria health interview surveys (HIS), many in cooperation with EUROSTAT or using EUROSTAT definitions. Some indicators are available from registries, such as the Cancer Registry. Data on poverty are available from income tax statistics, while data on workplace injuries are available from the General accident insurance company. Several indicators are available from the 2001 census.

Often the respondent has listed several data sources, sometimes using slightly different definitions, for the same indicator.

4d. Summing up

Graz has 24 indicators where the URHIS definition is used, 14 indicators using a different definition.

Vienna has 32 indicators where the URHIS definition is used, 13 indicators using a different definition.

5. BELGIUM - Brussels and Liege

A remarkable number of indicators are available from the two Belgian Urban Areas, and mostly according to the EURO-URHIS definitions.

There are no data on the number of homeless in Brussels, though this is at least in part available regarding Liege, apart from that, every single indicator is covered. (Brussels reports not knowing whether Q 34, breastfeeding, is reported, but the organisation listed for Liege also collects data for Brussels, so this has been changed in the spread sheet.) There are more indicators available for the Brussels UA than for the Liege UA, mostly due to local surveys.

5a Definitions

The two UAs Brussels and Liege have delivered their reports separately, and are at times not in agreement about whether the data collected is according to the EURO-URHIS definition or not. This may be caused by linguistic difficulties or unclear definitions on the questionnaire, at least in the cases where the two UAs report using the same source for the data.

In other cases, because of different surveys referenced, data according to the EURO-URHIS definitions is more often available for Brussels than for Liege. A good example is Q 22, diabetes, where both Brussels and Liege refer to the Scientific Institute for Public Health (WIV), where the figures were based on a survey (self-reported ever measured too high blood sugar), and Brussels in addition refers to a register for diabetes type 1 at the Vrije Universiteit Brussel.

5b Geography

Indicators are very, very frequently linked to postcode area. There do not seem to be any indicators that are available at all that are not available for the whole UAs.

5c Data sources

The main data sources for the EURO-URHIS indicators are health interview surveys and registries, such as the Belgian Cancer Registry. Both the interviews and surveys are mostly conducted by ADSEI and WIV for Brussels, ECODATA, STATBEL and IPH for Liege. Since all these sources seem to be national, not regional, it might be possible to get the same data from both UAs using the same sources.

5d Summing up

Brussels has 34 indicators where the URHIS definition is used, 12 indicators using a different definition.

Liege has 30 indicators where the URHIS definition is used, 16 indicators using a different definition.

6. Bulgaria - Plovdiv and Ruse

The same indicators are available for both these Urban Areas. No information is available on foreign migration (all data are on internal migration, not by nationality at all), homelessness, COPD (chronic obstructive pulmonary disease), psychological distress or people injured in traffic accidents. Nor is data available on cannabis consumption, breastfeeding, fruit and vegetable consumption, green spaces, PM10 pollution, noise or damp housing. The respondent has not included data on health insurance, and claims that there is no data on health education programmes. Data on demography are well covered using the EURO-URHIS indicators, while data on disease incidence/prevalence, screening and alcohol consumption use other definitions.

6a Definitions

Where definitions are not the same as the EURO-URHIS definitions, the alternative definitions used are often less useful and/or comprehensive, and often not very comparable to other countries' definition. An example: The Bulgarian version of Q32, on alcohol consumption, does not seek to identify the numbers of people using unsafe amounts of alcohol, but merely asks whether they use alcohol at all. Likewise, the Q 42, on breast cancer screening, just asks whether women have ever had a mammography.

6b Geography

The informant does not know whether any of the indicators might be available by postcode.

The demographic indicators are available for the UA, whereas most other indicators are only available for the entire country.

6c Data sources

The National Statistical Institute is the data source for the large majority of indicators. Other sources are the relevant Ministries, the National Centre for Health Information (cancer and vaccinations) and the National Social Security Institute.

6d Summing up

Plovdiv and Ruse both have 20 indicators where the URHIS definition is used, 12 indicators using a different definition.

7. CROATIA - ZAGREB

Apart from asthma, COPD and green spaces, some kind of data are available on all the URHIS indicators.

7a Definitions

Some indicators are available for much more stratified definitions than those used in our project. Education, for instance, is available for the population 15 and over in 11 different classes. Breastfeeding data are available for three age bands. Mothers' age distribution is available for 5 age bands, which do not correspond to the URHIS ones.

There is a diabetes register, but it does not seem to cover all cases, just ones known to this particular hospital, and road traffic injuries and injuries in the workplace may be registered using different methods of calculation/registration. Cannabis use is only known for specific school and student years.

7b Geography

Data are never available by post code. Some indicators, like population projections and poverty, are only available for the whole country. Others, like cancers, are only available for the region/county. Data collection is mostly done by national institutions.

7c Data sources

The Croatian adult health survey (Andrija Stampar School of Public Health) is an important source, as is the Croatian Bureau of Statistics (census/surveys). The Croatian Institute of Public health collects data on immunization, cancer screening (of which only mammography data are considered reliable). The Croatian Institute for Health insurance is also a data source.

7d Summing up

Zagreb has 27 indicators where the URHIS definition is used, 10 indicators using a different definition.

8. Cyprus - Nicosia

The urban area of Nicosia, consisting of Nicosia municipality, 6 surrounding municipalities, 2 communities and 2 other areas that are non government-controlled, is one of the urban areas with a lower than average number of collected health indicators out of the URHIS-45.

Some population data are available, but not data on the nationality of population or migration patterns.

There are data on household composition, education, unemployment and poverty, but no data on the number of homeless. Data on life expectancy, causes of death, and data on of the indicators for conditions surrounding childbirth, such as birth rate and infant mortality, are only available for the whole country.

There are data on diabetes, asthma and at least to some extent (with a different definition from the URHIS-45 one) on depression and psychological distress, only national data on HIV/AIDS and cancer incidence, though there are data on cancer screening.

There are data on self-reported health-related limitation of usual activities.

URHIS data on traffic injuries can be calculated, but there are only national data on work injuries.

There are data on alcohol consumption according to the URHIS-45 question, though the data on smoking and cannabis use have differing definitions.

There are no data on breastfeeding or fruit/vegetable consumption, but data on BMI are collected.

There are no data on damp housing and access to green spaces.

8a Definitions

Where data are available at all, the URHIS definitions seem to be in use. The exception is data on childhood vaccination, where Meningococcus C is not included. Though data on PM10 exposure and noise are collected, the exact definition is unknown.

8b Geography

In general, no data can be sorted by postal code, but when data are available for a health indicator, they are generally available for the whole urban area. When data are available on a national basis only, this does not include the disputed areas.

8c Data sources

The Statistical Service of Cyprus, which held a Health Survey in 2003, is the main source of information. The Ministry of Health has information on vaccinations, the Ministry of Agriculture on noise, the Ministry of Labour and Social Insurance on PM10 exposure and the police have data on road traffic injuries.

8d Summing up

Nicosia has 26 indicators where the URHIS definition is used, 6 indicators using a different definition.

9. Czech Republic - Pardubice, Plzen and Ostrava

There are data for the urban areas on all the usual demographic indicators, though data on foreign migration, household composition, unemployment and noise may not be available.

Data on the homeless, depression, psychological distress, fruit and vegetable consumption, green spaces and indoor dampness are not available.

The indicators of prevalence of chronic illness may not be available

Data on poverty, self-reported general health, limited activities and health insurance are only available on a national level.

Cervical cancer screening data are not collected.

9a Definitions

For the demographic variables, the Czech UAs use the URHIS definitions. Education is given from the age of 15, but in the same 4 classes. The indicator for perinatal mortality is replaced with neonatal mortality (0-7 days).

The indicator for COPD, and also the indicators for asthma and diabetes, are based on the patients treated, not on prevalence in the population.

Road traffic injuries are reported for age groups 0-14 and 15+.

Smoking data (national) are available for 6 age bands that only partially coincide with the URHIS ones, and alcohol consumption and use of cannabis are available for the same 6 age bands.

Height and weight data are also available for the whole nation.

The data on breastfeeding is available at 6 weeks and 6 months.

9b Geography

We were sent only one questionnaire for the Czech Republic, stating that the data available for the three cities are exactly the same.

No indicators can be linked to postcodes.

Injuries in the workplace is available by the nation, region and district – but not for the UAs unless they happen to coincide with the districts.

9c Data sources

The Czech Statistical Office – using both questionnaire surveys and census data – is the main source of data. A few indicators, such as HIV/AIDS incidence, are available from the Institute of Public Health. The cancer indicators and diabetes and asthma prevalence are available from the Institute of Health Information and Statistics of the Czech Republic (IHIS CR). The Czech Social Security Administration has questionnaire data on workplace injuries, while the Ministry of the Environment collects data on PM10 exposure. The Regional Public Health Authority collects vaccination data by annual surveys, which may possibly cover the UAs. The Masaryk University Institute of Biostatistics and Analyses have data on breast cancer screening (using a slightly different age group)

9d Summing up

Pardubice, Plzen and Ostrava all have 25 indicators where the URHIS definition is used, 8 indicators using a different definition.

10. Denmark - Copenhagen and Aalborg

There were some concerns with some of the definitions on the questionnaire, but after some discussion many indicators were filled in.

Data are available for all the demography based indicators.

No data are available for poverty, the homeless, the prevalence of diabetes, asthma, COPD and depression.

Data may not exist, or may have a different definition, on traffic and work injuries, breastfeeding, fruit and vegetable consumption, PM10 exposure, noise, dampness and breat cancer screening.

There is universal health insurance, so this question does not apply.

10a Definitions

Where data are available, the URHIS definitions are almost always used.

The definitions for the indicators on psychological distress, limited activity and alcohol consumption differ from the URHIS definitions.

10b Geography

The two Danish cities are covered by only one questionnaire, since the data available is exactly the same. In most cases, data are available by post code.

Data on BMI and alcohol consumption (the latter with a different definition) are only available for the whole country.

10c Data sources

Statistics Denmark was the only data source cited by our respondent.

10d Summing up

Copenhagen and Aalborg both have 23 indicators where the URHIS definition is used, 6 indicators using a different definition.

Considering the number of "don't know" replies it is possible that a higher number of indicators might be available.

11 Estonia - Tallinn

Apart from population projections, almost all the indicators according to the URHIS definitions could be calculated using linkage to the population register for the UA of Tallinn.

Data are not available on the homeless, noise, indoor dampness,

11a Definitions

Migration data from the population register are considered to be of low quality and are not published or used.

The definitions for chronic illness, asthma, COPD, depression, psychological distress, road traffic and workplace injuries, smokers, cannabis use and breastfeeding differ from the URHIS definitions.

The age group for breast cancer screening differs from the URHIS definition.

11b Geography

Most of the indicators are not usually linked to post codes, but this can be done in many cases.

Population projections are only calculated on a national level.

Green spaces and PM10 exposure data can only be given for the city of Tallinn, not for the Euro-URHIS conurbation area.

11c Data sources

The Statistical Office of Estonia, surveys and population register, is the main source of information for all kinds of population data.

The National Institute for Health Development has data on chronic illness, psychological distress, diabetes, smoking, alcohol consumption, cannabis use, fruit and vegetable consumption, BMI and cancer screening.

The Health Protection Inspectorate carries data on HIV/AIDS and vaccinations.

The Estonian Cancer Registry has data on cancer incidence.

The Ministry of Social Affairs has data on new cases of asthma and COPD (national data; of low quality) and breastfeeding.

The Estonian Road Administration has data on traffic injuries.

The Labour Inspectorate has data on workplace injuries.

The Estonian Environment Information Centre has data on green spaces and PM10 exposure.

The Estonian Health Insurance Fund has information on health insurance.

11d Summing up

Tallinn has 27 indicators where the URHIS definition is used, 16 indicators using a different definition.

12 Finland - Helsinki

Finland delivered an incomplete questionnaire, and despite several rounds of reminders we only received information about half of the indicators.

The population based indicators (1 - 16) are, on the whole, well covered (and available, except for low birth weight2, according to the respondent), as are the indicators concerning traffic injuries (with a different definition) and some environmental indicators, excluding indoor dampness.

There are no replies for any other indicators.

Internet search shows many of the indicators where the respondent has not replied seem to be available from different sources.

12a Definitions

The population projections only go up to 2040.

The definition of homeless people, road traffic injuries and green spaces differ from the URHIS definition. PM10 exposure and noise are uncertain – the respondent has checked both the boxes for "same definition" and for "different definition".

12b Geography

When the respondent has stated that an indicator is available at all, it is always available for the entire UA and never linked to postcode.

12c Data sources

City of Helsinki Urban Facts/Helsinki Region Statistics, register data only, according to the respondent.

WP8 internet search shows many other data sources.

12d Summing up

Helsinki has 15 indicators where the URHIS definition is used, 4 indicators using a different definition.

 $^{{\}bf 2} \ \ {\bf The \ indicator \ on \ low \ birth \ weight \ is \ available \ from \ the \ Finnish \ Medical \ Birth \ Registry.}$

Considering the very high number of missing replies, and what is known about the Finnish health information system in general, it is very likely that both numbers should be much higher.

13 France - Bordeaux, Limoges, Montpellier and Strasbourg

The respondent has sent us only one questionnaire for the 4 French Urban Areas, since the data availability is the same for all of them.

Almost all indicators are available, except chronic illness, diabetes, COPD, psychological distress, health related limitations of activities, noise, cervical cancer screening. Health insurance is near universal and therefore not a relevant indicator.

13a Definitions

The definitions for population projection, road traffic and workplace injuries, breastfeeding and breast cancer screening differ from the URHIS definition.

The respondent it not sure about the definition used to calculate unemployment rate, asthma, depression, fruit and vegetable consumption, green spaces, PM10 exposure and indoor dampness.

13b Geography

No indicators are available by postcode.

It is possible to aggregate municipal data to get data for each urban area, except in a few cases when data are only available on a national/regional/department level, such as the number of homeless people, low birth weight HIV/AIDS, lung and breast cancer (national and regional estimates only), perceived general health (national estimates from survey), smoking, alcohol and cannabis consumption, breastfeeding, BMI, vaccination and breast cancer screening

13c Data sources

INSEE, census and estimates, in the case of some indicators, such as birth rate and infant mortality, also register data. This is the main source of data.

Other sources are INSERM (causes of death), DREES (low birth weight, breastfeeding and vaccination), INVS (AIDS/HIV, breast cancer screening), ONISR (traffic injuries), CNAM (workplace injuries) and INPES (survey data on many health behaviour based indicators).

13d Summing up

Bordeaux, Limoges, Montpellier and Strasbourg all have 22 indicators where the URHIS definition is used, 6 indicators using a different definition.

The number of "don't knows" is unusually high, so several more indicators may be available.

14. Germany - Frankfurt, Leipzig and Munich

Data availability is lower than average, and the definitions are rarely according to the URHIS definitions. They may also differ for the three German UAs.

None of the UAs collect data on education, HIV/AIDS, psychological distress, workplace injuries, cannabis use, breastfeeding, fruit and vegetable consumption, indoor dampness and cancer screening.

Frankfurt also lacks data on chronic illness, the homeless, low birth weight, perceived general health, lung and breast cancer, diabetes, asthma, COPD, depression, health related limitations, smoking, alcohol consumption, BMI (except at school enrolment), green space, PM10 exposure and health insurance.

Leipzig has no data on chronic illness, the homeless, perinatal mortality, lung and breast cancer, diabetes, asthma, COPD, depression, health related limitations, BMI and PM10 exposure.

14a Definitions

Definitions vary, both across the three UAs and according to the URHIS definitions.

The usual demographic indicators are available for Frankfurt, though migration is only defined as German/non-German, not according to whether the immigrant is an EU citizen.

The definition for perinatal mortality is uncertain.

Road traffic injuries are reported, but not by age band.

The definitions for unemployment, poverty and noise differ from the URHIS definition.

Leipzig only has population projections up to 2025, and does not collect data on non-Germans moving to the UA. Life expectancy is available for the region, not the city or UA.

- Leipzig's definitions of perinatal mortality, mothers' age distribution, smoking and alcohol consumption differ from the URHIS definition
- Road traffic injuries are reported, but not by age band. The definition for noise differs from both the URHIS definition and what seems to be Frankfurt's definition.

Munich's definition for population projection is very detailed, but only runs up to 2015.

- Information on EU and non-EU nationals' migration is available.
- The definitions of unemployment rate, poverty, perinatal mortality, mothers' age distribution, chronic illness, differ from both the URHIS definition and Munich's definition.
- There are estimates on the homeless, but not with a definition that is comparable to the URHIS definition.
- The indicators for diabetes, asthma, COPD, perceived general health, depression, health related limitations, smoking, alcohol consumption (differs from the URHIS definition), BMI and health insurance cover the population ages 18 to 79, but only the German-speaking.
- BMI is also available at school enrolment.
- Regarding road traffic accidents, the city and district of Munich have absolute numbers, with many more age bands, instead of the URHIS definition.
- PM10 exposure and noise are monitored, but not in ways that are comparable to the URHIS definitions.
- Vaccination status at school enrolment is available for the URHIS urban area.

14b Geography

For Frankfurt, data may be available just for the city of Frankfurt, and not for the whole UA.

For Leipzig and Munich, ditto for the cities of Leipzig and Munich. In fact, not one single indicator is available for any of the urban areas in question.

Data are never available by postcode for Frankfurt and Leipzig, while Munich has a few population based indicators that are available by postcode.

14c Data sources

Frankfurt: Bürgeramt für Statistik und Wahlen is the main data source.

 Stadtsgesundheitsamt reports children's height and weight and vaccination status at school enrolment.

Leipzig: Stadt Leipzig Amt für Statistikk und Wahlen is the main data source, including data on pre-school vaccinations.

Munich: Landhauptstadt München Statistiches Amt is the main data source.

- Amt für Migration und Wohnen has the estimates on homelessness.
- Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit have questionnaire data (from the time of school enrolment) on children's birth weight and vaccination status.
- Bayerisches Landesamt f
 ür Statistik und Datenverarbeiterung has causes of death, covering the entire UA.
- Gesundheits- und Umweltberichterstattung has questionnaire data on chronic illness, diabetes, COPD, perceived general health, depression, health related limitations, smoking, alcohol consumption, BMI and health insurance.
- The Population Based Cancer Registry Bavaria (and local registries) has data on cancer for the whole UA.
- The Polizeipräsidium München has data on traffic accidents.
- Referat f
 ür Stadtplan und Bauordnung has data on green spaces.
- Bayerisches Landesamt f
 ür Umwelt has data on PM10 exposure.
- Referat für Gesundheit und Umwelt covers noise with a map based on local measurements.
- In addition, the Robert Koch Institut and the Gemeinsame Krebsregister are mentioned as possible sources of information, and could merit further investigation.

14d Summing up

Frankfurt has 11 indicators where the URHIS definition is used, 7 indicators using a different definition.

Leipzig has 15 indicators where the URHIS definition is used, 10 indicators using a different definition.

Munich has 14 indicators where the URHIS definition is used, 20 indicators using a different definition.

15 Greece - Athens and Thessaloniki

Please note that the following remarks only apply to Athens – there are NO data for Thessaloniki.

The general population-based indicators are available, but possibly not for people moving within Greece.

Data on household composition, perinatal mortality, COPD, depression, psychological distress, breastfeeding, fruit and vegetable consumption, green space, PM10 exposure, noise and indoor dampness are not available.

The indicators on cause of death may not be available for the whole UA.

15a Definitions

On the whole, the definitions used are the same as those used in the Euro-URHIS project. Possible exceptions are health related limitations of usual activities, BMI, vaccination and cancer screening, where the respondent is not sure.

15b Geography

Not one single indicator is available for the UA of Thessaloniki.

The indicators available are usually available both for the nation, for the major metropolitan area and for just the city of Athens. The indicators Athens are either not linkable to postcodes or the respondent doesn't know.

Life expectancy, infant mortality, low birth weight, AIDS/HIV, lung and breast cancer, diabetes and asthma are only available on a national level.

15c Data sources

The National Statistical Service of Greece' census (every 10 years) is the main source of data.

15d Summing up

Athens has 32 indicators where the URHIS definition is used, 1 indicator using a different definition.

Thessaloniki has no indicators of any sort.

16 Hungary - Budapest and Debrecen

Data are not available on population projections, the homeless, chronic illness, depression, BMI, damp housing or cervix screening.

16a Definitions

The majority of indicators in use have a different definition than the URHIS definitions. This is sometimes caused by the use of different age bands, which in many cases are not comparable to the URHIS age bands. Only some of the population-based indicators, HIV/AIDS, breast cancer, diabetes, cannabis use and the three indicators from the City Councils are directly comparable.

16b Geography

Household size is available for the UA of Budapest, but not for the UA of Debrecen. Mothers' age can be summed up for both the UAs, but is not normally calculated. Apart from these two indicators, no indicators are available for the urban areas, just for the cities or the nation.

16c Data sources

The Hungarian Central Statistical Office (KSH) is the main data source. Other sources are the Regional Health Database (REA/ESKI) (data on morbidity), Urban Audit, National Labour Service (AFSZ) (unemployed), Health Care Authority (OSZMK), City Council of Budapest/Debrecen (green space, PM10 exposure, noise) and Public Health Authority (ÁNTSZ).

16d Summing up

Budapest has 21 indicators where the URHIS definition is used, 18 indicators using a different definition.

Debrecen has 22 indicators where the URHIS definition is used, 17 indicators using a different definition.

17 Iceland - Reykjavik

The Icelandic questionnaire was only partially filled in, and in addition, the majority of questions had the alternative "Not sure" as a reply. In many of the latter cases, the respondent has directed us to a person who might know, either about national definitions or national (probably not UA) availability of data.

Indicators where the respondent has stated positively that no data are available: Chronic illness, psychological distress, health related limitations of usual activities,

17a Definitions

Many indicators are problematic because the population is so small. Definitions in use on unemployment, general health, depression, alcohol consumption and traffic injuries differ from the URHIS definitions.

17b Geography

Population projections are only available on a national level. In general, we do not know whether many of the other indicators are available for the UA, but background material makes this sound rather unlikely.

17c Data sources

Where the respondent has replied, the contact information for the specific individual in charge of the indicator in question is available. Statistics Iceland, RHUS-RVK, Directorate of Health, the Icelandic Cancer Society and in particular the Public Health Institute of Iceland are the data sources described.

17d Summing up

Reykjavik has 12 indicators where the URHIS definition is used, 5 indicators using a different definition. Since the number of "don't know" replies is so very high, it is difficult to know whether there actually exist more indicators on an UA level, though national indicators, at least for some of the subjects, are likely to exist.

18 Ireland - Dublin

The Dublin Regional Authority area includes the city of Dublin and four units of primary local government. This urban area has very good coverage of the URHIS-45 indicators, but quite frequently other definitions are used.

Only two URHIS-45 indicators are not collected at all, the availability of green spaces for the inhabitants and the prevalence of cervix screening. (The Irish Cervix Screening Programme is now in operation in other areas of Ireland, but not in the Dublin area.)

18a Definitions

The definitions in use are often according to other international standards and frequently fairly comparable to the URHIS-45 definitions, but in some cases, data can be calculated to be more comparable.

18b Geography

Data are, with few exceptions, available for the whole urban area.

Data are never available on a postcode level, because, as the informant states, Ireland is the only country in Europe without a system of postcodes. It is anticipated that this will be introduced within the next few years, though the informant has not stated that data will necessarily become available at such a level of detail.

18c Data sources

The Central Statistics Office (with contact points for particular indicators – this is the main data source), the Homeless Agency, the National Perinatal Reporting System (at ESRI), the Health Protection Surveillance Centre (HIV/AIDS, vaccinations), the National Cancer Registry (cancer screening), the Institute of Public Health in Ireland (diabetes), the Department of Health and Children (asthma, COPD, depression, psychological distress, alcohol consumption, cannabis use), the Road Safety Authority (accidents), the Office of Tobacco Control, the Irish Universities Nutrition Alliance (fruit and vegetables, BMI), the Environmental Protection Agency and the National Cancer Screening Service.

18d Summing up

Dublin has 16 indicators where the URHIS definition is used, 28 indicators using a different definition.

19 Italy - Milano, Palermo and Rome

The availability from these three Italian UAs is similar, particularly Palermo and Rome, but by no means identical.

Data availability is good, generally according to the URHIS definitions, with some surprising gaps, like consumption of alcohol and cannabis use, while lung cancer is only available for Milano. Data on breast and cervix screening are not available for Palermo. Data on mental health, homelessness, fruit and vegetable consumption, green space and noise are not available for any of the three Italian UAs.

19a Definitions

In many cases, the definitions used, particularly for morbidity, do not correspond to the URHIS definitions. They are, however, often comparable, at least to some degree.

19b Geography

Many indicators, particularly the population based ones, are available at census block level (population about 500). It is unclear whether this corresponds to availability on postcode level.

Other indicators are available for cities or regions, but not for the Urban Areas.

19c Data sources

The National Institute of Statistics (ISTAT) is the main data source. Other sources are ASL Città de Milano, Assessorato alla Sanità Palermo, ASL RME, Istituto Superiore de Sanità (HIV/AIDS), Regione Lombardia (workplace injuries).

19d Summing up

Milano has 26 indicators where the URHIS definition is used, 12 indicators using a different definition.

Palermo has 22 indicators where the URHIS definition is used, 12 indicators using a different definition.

Rome has 24 indicators where the URHIS definition is used, 12 indicators using a different definition.

20 Latvia - Riga

No data are available on population projections, migration, COPD, the two mental health indicators, green space, noise or damp housing.

Web pages and specific reports and contact persons are often cited.

20a Definitions

Some definitions vary a lot from the URHIS definitions, and there are some indicators, like unemployment, where the two definitions may be comparable. In some cases, like BMI, it would be easy to calculate data according to the URHIS definition. In general, the number of indicators comparable to the URHIS definitions is rather low.

20b Geography

Some indicators have exactly the same definitions as the URHIS ones, but data are only available for the whole country. Others include data for the city of Riga, but not for the Urban Area.

There do not seem to be any indicators available on a post code level, though the correspondent has marked "not sure" in many cases.

20c Data sources

The Central Statistical Bureau, Health Statistics and Medical Technologies State Agency (indicators concerning babies and childbirth, causes of death, some morbidity), Public Health Agency (morbidity, health related behaviours), Road Traffic Safety Directorate, State Labour Inspectorate, Latvian Environment, Geology and Meteorology Agency, Health Compulsory Insurance State Agency.

20d Summing up

Riga has 22 indicators where the URHIS definition is used, 11 indicators using a different definition.

21 Lithuania - Kaunas

No data are available on population projections, poverty, the homeless, life expectancy, chronic illness, depression, limited activity, damp housing or cancer screening.

Data on the collection of the health indicators are particularly detailed, and web pages and reports are listed.

21a Definitions

A number of indicators have definitions differing from the URHIS definitions. Different age groups, not dividing the migrating population by country of origin etc may make it difficult to compare data.

Data on risk behaviours (smoking, alcohol and cannabis consumption) is, however, available from many different sources and age groups, so perhaps it would be possible to produce some comparable data.

21b Geography

Data are frequently only available on a national and/or county level, but respondent states that data for the UA could be calculated on special request for some indicators.

21c Data sources

Statistics Lithuania (also publishes data from other sources), Kaunas Municipality, Lithuanian Labour Exchange, Lithuanian Health Information Centre, Lithuanian Cancer Registry, Morbidity database SVEIDRA, Institute of Cardiology at Kaunas University of Medicine, Kaunas Police Office, State Labour Inspectorate, Environment Protection Division of Kaunas Municipality, State Meteorology Register, Kaunas Regional Patient Fund.

Smoking, alcohol and cannabis consumption and fruit and vegetable intake data for different age groups, students etc available in specific publications and web pages.

MONICA data are frequently cited.

21d Summing up

Kaunas has 19 indicators where the URHIS definition is used, 18 indicators using a different definition.

Macedonia - Skopje

Data on general health, limited activity, green space, damp housing, noise and cancer screening are not available.

Websites and specific reports are cited.

21a Definitions

A very large number of indicators are available according to the URHIS definitions.

21b Geography

Data are frequently available for the 10 municipalities of Skopje + the municipality of Sopishte. Whether this corresponds to data availability by postcode is not known.

21c Data sources

The State Statistical Office is the main source of data. Some data are also available from the Republic Institute for Health Protection, Cancer Registry in the Republic of Macedonia, Diabetes Mellitus Registry in the Republic of Macedonia and the Ministry of Environment and Physical Planning.

21d Summing up

Skopje has 29 indicators where the URHIS definition is used, 10 indicators using a different definition.

22 Malta - Valetta

There are no data on migration, the homeless, depression, green space, pollution, noise or damp housing.

22a Definitions

Where indicators are available, they are generally calculated according to the URHIS definitions.

22b Geography

Data are never available by post code, and frequently only available for the whole country. Some indicators might be available or possible to calculate on a regional level.

22c Data sources

National Statistics Office, Department of Health Information (Health Interview Survey) and the Department of Public Health (HIV/AIDS).

22d Summing up

Valetta has 29 indicators where the URHIS definition is used, 9 indicators using a different definition.

23 Netherlands – Amsterdam (Municipalities of Amsterdam and Diemen) & Utrecht (Greater Utrecht)

On the whole, the two Dutch UAs have excellent health indicator coverage. Only indicators for workplace injuries and noise were unavailable for Amsterdam, while Utrech also lacked the two indicators for mental health and traffic and work injuries.

In some cases, a "don't know" reply for one of the UAs indicated that there may be bigger differences.

23a Definitions

Many indicators are available from population registers.

Where local definitions vary from the URHIS definitions, URHIS definition data can in most cases be calculated – like migration, where data are available by the year, not for a two-year period.

Where the "don't know" reply is given, written information suggests that an indicator is available, but that the definition was not known to the informant.

23b Geography

When data are available, is is most often also available on a post code level.

23c Data sources

Department for Research and Statistics Amsterdam (population register and survey data), Municipal Health Service Amsterdam, Central Bureau of Statistics (Causes of Death), HIV Monitoring Foundation, Dienst Ruimtelijke Ordening Amsterdam (green space), Comprehensive Cancer Centre Amsterdam, separate municipalities in the UA of Utrecht (population register), Municipal Health Service Utrecht / Midden Nederland (survey data), Aveant Utrecht (low birth weight), Dutch Cancer Registry, Milieu en Natuur Planbureau (noise, green space), Preventicon (cancer screening, Utrecht).

It seems that the some of the sources, especially the national ones, might have data for both UAs, though these sources were just given for one of the two UAs.

23d Summing up

Amsterdam has 32 indicators where the URHIS definition is used, 11 indicators using a different definition.

Utrecht has 28 indicators where the URHIS definition is used, 11 indicators using a different definition.

24 Norway - Oslo

Data of some sort are available for all indicators, though quite frequently the local definitions may not be at all compatible with the URHIS definitions.

24a Definitions

Many indicators are available from population registers, which means they can be linked.

24b Geography

Data are never available by postcode, but some indicators can be calculated by municipal borough. Some indicators are only available for the whole country.

24c Data sources

Statistics Norway, Norwegian Institute of Public Health (Cause of death, Vaccination and Prescription registries, HUBRO surveys), Cancer Registry of Norway, SINTEF Byggforsk and Norwegian Institute for Urban and Regional Research (NIBR) (estimates for homeless), the Norwegian Labour Inspection Authority, Norwegian Institute for Alcohol and Drug Research (SIRUS), Directorate of Health (breastfeeding, fruit and vegetable consumption), Municipality of Oslo (green space, noise), Norwegian Institute for Air Research,

24d Summing up

Oslo has 30 indicators where the URHIS definition is used, 17 indicators using a different definition.

25. Poland -Katowice, Krakow and Lodz

There are no data on poverty for Katowice and Krakow, while Lodz has data (with a different definition). None of the UAs have data on the homeless, general and mental health, cannabis use, breastfeeding, BMI, noise or damp housing.

Web pages (in Polish) are referred to for almost all indicators.

25a Definitions

According to the replies given, definitions may vary between the UAs on some indicators, but particularly for Katowice there are several instances of there being no reply on the questionnaire.

The local definitions for roughly half the indicators differ from the URHIS definitions, and there are too few comments to judge whether the indicators are comparable.

An unusual number of indicators are produced by administered questionnaire, including cause of death and AIDS/HIV rates.

25b Geography

Data are not available on a postcode level, but frequently, particularly regarding population data, available on voivodeship (district) level.

25c Data sources

Statistical Office in Katowice/Krakow/Lodz, Silesian Centre of Public Health, National Institute of Hygiene (AIDS/HIV), Centre of Oncology Marie Sklodowska-Curie, Headquarters of Police in Katowice/Krakow/Lodz, District Epidemiological Institute Katowice/Krakow/Lodz, Slaski Oddzial Wojwodzki NFZ Katowice/Krakow/Lodz (cancer screening), Małopolskiego Centrum Zdrowia Publicznego (perinatal mortality, Krakow), Environmental Inspectorate of Katowice/Krakow/Lodz.

25d Summing up

Katovice has 13 indicators where the URHIS definition is used, 18 indicators using a different definition.

Krakow has 18 indicators where the URHIS definition is used, 19 indicators using a different definition.

Lodz has 16 indicators where the URHIS definition is used, 21 indicators using a different definition.

26 Romania - Bistrita, Cluj-Napoca and Iasi

None of the UAs have data on population projections, migration, only lasi seems to have data on household composition and possibly homelessness (don't know instead of not available), Bistrita has no data on general health, work injuries, BMI, noise or health insurance. None of the UAs have data on mental health, limited activity, smoking, alcohol, cannabis use, breastfeeding, green space, pollution, damp housing or cancer screening.

26a Definitions

Where data are available, the definitions are frequently the same as the URHIS definitions.

26b Geography

No indicators seem to be available on a postcode level, though there are some "don't knows". Data seems to be available on a district level for most indicators. Some indicators (like breast cancer incidence) are collected at a district level, but reported on a national level.

26c Data sources

The majority of data come from census registration; there are also some unspecified "reports".

District Statistics Bureau, National Statistics, Ministry of Public Health, District Public Health Authority, District Office of Workforce and Unemployment, Ministry of Health, City Hall in the cities.

26d Summing up

Bistrita has 17 indicators where the URHIS definition is used, 4 indicators using a different definition.

Cluj-Napoca has 19 indicators where the URHIS definition is used, 5 indicators using a different definition.

lasi has 18 indicators where the URHIS definition is used, 7 indicators using a different definition.

27 Slovakia - Bratislava and Kosice

The only indicator that is definitely not available for these two UAs is damp housing. There are quite a few "not sures", but since they're all followed by references and sources for the indicators in question, I take them to mean "not sure" about local definition, not about availability.

Methodological notes, comments and contact data are all extremely thorough and methodical, including web page addresses.

27a Definitions

In the few cases where the local definition is not the URHIS definition, the URHIS indicator can usually be calculated from the data available, since what is collected locally is more detailed. The education indicator, for instance, has 12 alternatives in Slovakia, whereas the URHIS indicator only asks for 4 levels. The respondent also refers to the difference between self-reported survey data and data from reports from health care facilities, such as for the indicator for chronic illness.

27b Geography

The majority of indicators can be linked to postcode data ("Yes, it can be linked to postcode data, but the postcode data system is more detailed").

27c Data sources

The amount of information about data sources is most impressive. Many indicators are available from more than one source. The most important source seems to be the Statistical Office of the Slovak Republic followed by the Demographic Research Centre, National Centre for Health Information, Public Health Authority of the Slovak Republic, Kosice Institute for Society and Health (psychological distress, smoking, alcohol and cannabis, both UAs), Social Insurance Company, Board of Ministers for Drug Dependencies and Drug Control, Research Institute of Child Psychology, Ministry of Agriculture, Association of Healthy Cities of Slovakia, Ministry of the Environment of the Slovak Republic, plus references to different research reports.

27d Summing up

Bratislava and Kosice both have 35 indicators where the URHIS definition is used, 4 indicators using a different definition.

28 Slovenia - Maribor

There are no data on asthma, COPD, General health, mental health, limited activity, breastfeeding, BMI, green space, pollution, noise or damp housing.

Web pages and sometimes contact persons are cited.

For asthma, sources are mentioned, so some data may be available after all.

28a Definitions

For the majority of indicators, the URHIS definitions are used.

For a few indicators, such as road traffic injuries, the data available is much more detailed than the URHIS definition requires.

28b Geography

When data are available, they can often be linked to postcodes.

28c Data sources

Ministry of Internal Affairs (SORS), Institute of Macroeconomic Analysis and Development (UMAR), Institute of Public Health of the Republic of Slovenia, Institute of Oncology Ljubljana, Slovenian Diabetes Association, CINDI and specific individuals for research reports.

28d Summing up

Maribor has 25 indicators where the URHIS definition is used, 8 indicators using a different definition.

29 Spain - Barcelona, Madrid and Valencia

None of the three UAs have data on depression, cancer incidence and dampness.

Valencia has no data on cannabis use and cancer screening, whereas Barcelona only lacks data on cervix screening.

There are thorough references with web pages.

29a Definitions

The majority of indicators are not collected using the URHIS definitions, but in total, a very large number of indicators are covered.

29b Geography

A few indicators, mainly population-based ones, may be available by postal code (reply "don't know"). All the other indicators are not available by postal code. Some data can only be had at a national level, the majority of data both at NUTS 2 and NUTS 3 (national plus provincial) level.

29c Data sources

National Statistical Institute, Public Health Agency of Barcelona/Madrid/Valencia, Traffic General Direction (DGT), Ministry of Labour and Social Affairs, Department of Health of Catalonia/Valencia, Municipal Institute of Parks and Gardens of Barcelona, Department of the Environment of Catalonia/Valencia, Statistical Office of Catalonia, Public Health Agency of Barcelona/Madrid, Observatory of Public Health, Barcelona, Anti-drug Agency of the Comunidad de Madrid, Council of Madrid, Department of Noise Control (Madrid), Statistical Office of the Council of Valencia,

29d Summing up

Barcelona has 15 indicators where the URHIS definition is used, 24 indicators using a different definition.

Madrid has 16 indicators where the URHIS definition is used, 25 indicators using a different definition.

Valencia has 16 indicators where the URHIS definition is used, 23 indicators using a different definition.

30 Sweden - Gothenburg and Helsingborg

Data on green space is not available for Gothenburg; data on asthma, limited activity, fruit and vegetable consumption and green space is not available for Helsingborg.

30a Definitions

The majority of data available are according to local definitions and are not directly comparable with the URHIS definitions.

30b Geography

Data may be available by city districts, which do not necessarily correspond to postcodes.

National data from surveys is said to be available at a county level.

30c Data sources

Statistics Sweden, Swedish National Labour Market Board, National Board of Health and Welfare, Swedish Institute for Infectious Disease Control, Swedish National Institute of Public Health, Swedish Road Administration, Swedish Work Environment Activity, Swedish Council for Information on Alcohol and other Drugs, possible regional air environment unions, National Board of Housing, Västra Götaland County Council (cancer screening; Gothenburg), Region Skåne County Council (cancer screening; Helsingborg).

30d Summing up

Gothenburg has 17 indicators where the URHIS definition is used, 29 indicators using a different definition.

Helsingborg has 15 indicators where the URHIS definition is used, 28 indicators using a different definition.

31 Turkey - Ankara, Istanbul, Izmir and Bursa

Data on the four UAs seem to be identical. There are no data on the homeless, perinatal mortality, chronic illness, depression, limited activities, cannabis use, fruit and vegetable consumption, pollution, noise, damp housing, cancer screening or health education programmes.

Web pages and references are listed, along with very clear definitions for many of the the local indicators.

31a Definitions

Two thirds of the available indicators are collected using the URHIS definitions. The other indicators are not very comparable. For instance, Cause of death is registered according to the hospital address, not the address of the patient.

Some indicators will become available in the near future, such as cancer incidence.

31b Geography

Many indicators are national, regional or provincial, but it may be possible to derive the data for some selected UAs.

Some indicators, such as COPD and psychological distress are available from descriptive or cross sectional studies at a local level, and may not necessarily be representative. They are, nevertheless, included among the available data on the spreadsheet, though they will most likely not cover the UAs.

Data are never available by postcode.

31c Data sources

Turkish Statistical Institute, the Hacettepe Institute of Population Studies, General Directorate of Population and Citizenship, Ministry of Health, Provincial police departments (register traffic injuries, though data are not collated), Ankara Greater Municipality Parks and Gardens Directorate. Sources for the local studies are not listed.

31d Summing up

Ankara, Istanbul, Izmir and Bursa all have 22 indicators where the URHIS definition is used, 11 indicators using a different definition.

32 UK - Birmingham, Cardiff, Glasgow and Manchester

It is obvious that very different indicator sets are collected in these four UAs.

Birmingham has no indicators for COPD, mental health, cannabis use, noise or damp housing.

Cardiff has no indicators for non-British migration, cannabis use, noise or health education programmes.

Glasgow has no indicators for poverty, chronic illness, asthma, COPD, depression or noise.

Manchester has no indicators for psychological distress, green space or pollution.

The respondents might have been able to find more indicators for their own UAs if they had noticed what the others had managed to find, since many of the data sources are national and not regional.

There are mostly very clear descriptions of local indicators, with web references. Cardiff also gives contact persons.

32a Definitions

Many local definitions differ a lot from the URHIS definitions. Population figures, for instance, are by ethnicity or country of birth, not nationality. Age bands for cancer screening differ from the URHIS age bands.

32b Geography

Many indicators, particularly the population based or cancer related ones, are available on a postcode level for all four UAs. Data identificable to individuals may only be released on an aggregated postcode level.

GP practice registers (for morbidity indicators, such as asthma and diabetes) will give crude prevalences per practice, not by patients' postcode. They may be acceptable at an UA level.

32c Data sources

Office for National Statistics (most important source), Government Actuary's Office, Office of National Surveys, Department of Health, Health Protection Agency, Cancer Registries, National Health Service (QOF), Department for Transport, Health and Safety Executive, National Census, Department for Work and Pensions, Screening Services Wales, Health Solutions Wales, Cardiff Council, Welsh Assembly Government, Welsh Cancer Intelligence and Surveillance Unit, National Public Health Service for Wales, ISD Scotland Cancer Surveillance System, ICD Scotland, Scottish Executive, UK Air Quality Archive, Glasgow and Clyde Valley Structure Plan Joint Committee, Scottish Health Survey, Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS), UK Health and Safety Executive, Communities and Local Government, Clinical and Health Outcomes Knowledge Base, Information Centre for Health and Social Care, the Home Office,

Different national agencies have in some cases been listed for the same (local) indicator – it is assumed that using the same data source would give better comparability.

32d Summing up

Birmingham has 16 indicators where the URHIS definition is used, 21 indicators using a different definition.

Cardiff has 26 indicators where the URHIS definition is used, 16 indicators using a different definition.

Glasgow has 24 indicators where the URHIS definition is used, 17 indicators using a different definition.

Manchester has 12 indicators where the URHIS definition is used, 31 indicators using a different definition.

WP9: Population Impact Measures

Executive Summary

1. Objectives

The objectives for this Work Package (WP9) were:

To develop the best way of presenting data on urban health indicators so that they can be understood and lead to policy implementation

and

To compare the ways health information for exemplar conditions are summarised and presented and prepare summaries of how Population Impact Measures (PIMs) can be used to emphasize the public health impact of risks to urban health

2. Findings

Policy-making is under the influence of bureaucratic and political processes often not utilising evidence-based methodology. Population Impact Measures were identified as a potential presentation method. They have the advantage of being measures of absolute risk relevant to the whole population that is they identify actual numbers of individuals in a population who will either be at risk of a health outcome, or who will benefit from an intervention.

Examples of two urban health problems were chosen to work with: the risk of cigarette smoking in the causation of asthma, and the benefit of a methadone treatment programme in reducing the mortality from drug use with heroin.

Calculations were made of the population impact of both of these examples, and presented for discussion at two EURO-URHIS meetings. Conclusions were as follows:

- Population Impact Measures translate two types of information, local data and research findings, into real numbers in a population who are at risk or who might benefit from an intervention, and this may help policy-makers in evidence-based decision-making.
- It is possible to make measures of the Population Impact of risks and interventions, although for some risks and benefits the data required are difficult to obtain.
- Training will be required for policy-makers to understand the requirements for data collection, methods of calculation and implementation of the measures

3. Recommendations

- Population Impact Measures have a potential role in helping with the implementation of health indicators into policy, and should be included amongst the methods of presentation of indicators of urban health.
- Further work should be undertaken to help understand the bureaucratic and political processes that go into policy-making and the role of the type, and method of presentation, of health indicators to inform this process.

Main Report

1. Objectives

The objectives for this Work Package (WP9) are:

To develop the best way of presenting data on urban health indicators so that they can be understood and lead to policy implementation

To compare the ways health information for exemplar conditions are summarised and presented and prepare summaries of how Population Impact Measures (PIMs) can be used to emphasize the public health impact of risks to urban health

2. Population Impact Measures

2a Policy-making

Policy-making is under the influence of bureaucratic and political processes often not utilising evidence-based methodology. We have developed a new set of indicators to describe the population impact of risks and benefits. These provide local context to previous measures, allowing policy-makers to identify and prioritise the potential benefits of interventions on their own population using empirical estimates of risk from the evidence.

In order to achieve the objectives defined for this Work Package, we used the PIMs as a way of presenting the urban health indicators developed in EURO-URHIS.

2b 'Population Impact Number of Eliminating a Risk factor (PIN-ER-t)' and 'The Number of Events Prevented in a Population (NEPP)'

To describe the impact of preventive and treatment interventions, the Number of Events Prevented in a Population (NEPP) is defined as "the number of events prevented by the intervention in your population over a defined time period". NEPP extends the Number Needed to Treat (NNT) beyond the individual patient to the population. To describe the impact of a risk factor on causing ill health and disease the Population Impact Number of Eliminating a Risk factor (PIN-ER-t) is defined as "the potential number of disease events prevented in a population over the next t years by eliminating a risk factor". The PIN-ER-t extends the well-known Population Attributable Risk (PAR) to a particular population and relates it to disease incidence.

Formulae

The components for the calculations of the two PIMs are as follows: Population denominator (size of the population); Proportion of the population with the disease; Proportion of the population exposed to the risk factor or the incremental proportion of the diseased population eligible for the proposed intervention (the latter requires the actual or estimated proportion who are currently receiving the interventions 'subtracted' from best practice goal from guidelines or targets); Baseline risk – the probability of the outcome of interest in this or similar populations; and Relative Risk of outcome given exposure to a risk factor or Relative Risk Reduction associated with the intervention.

Population Impact Number of Eliminating a Risk factor (PIN-ER-t)

PIN-ER-t is described as 'the potential number of events prevented in your population over the next t years by eliminating a risk factor'. It is an extension of the well-known measure, Population Attributable Risk

The formula for this PIM is given as:

 $PIN-ER-t = n * I_n * p(RR-1)$

1+ p(RR-1)

 $\begin{array}{lll}
N & = & population size \\
I_p & = & incidence of outcome \\
P & = & prevalence of risk factor
\end{array}$

RR = Relative risk for risk factor outcome relationship

The Number of Events Prevented in a Population (NEPP)

NEPP is described as "the number of events prevented by the intervention in your population over a defined time period". It is a population extension of the well-known measure, Number Needed to Treat.

The formula for NEPP is:

 $NEPP = n * P_d * P_e * r_u * RRR$

N = population size

P_d = prevalence of the disease / health condition

P_e = proportion eligible for treatment

r_{...} = risk of the event of interest in the untreated group or

baseline risk over appropriate time period

RRR = Relative risk reduction associated with treatment

Examples of use

The population impact of implementing a range of preventive and treatment interventions on defined and identified populations, through calculation of Population Impact Measures (PIMs), have been assessed previously (REFS)(1-8). The paper "Implementing guidelines in primary care: can population impact measures help?" demonstrates how population impact measures could help prioritise resource allocation in terms of implementation of local, national and international guidelines (5). The paper "Using economic analyses for local priority setting: the population cost-impact approach" identifies costs and benefits of potential interventions to a defined population (9), which may be of considerable use for policy-makers working at all levels. We are working on a paper that demonstrates how population impact measures are used to quantify the impact of health inequality which could help focus health policy and target interventions based on patterns of inequality.

Benefits of utilisation

PIMs provide local context to previous measures, allowing policy-makers to identify and prioritise the potential benefits of interventions on their own population. They have the advantage of being measures of absolute risk relevant to the whole population, that is they identify actual numbers of individuals in a population who will either be at risk of a health outcome, or who will benefit from an intervention, and contain the elements to which policy-makers would have to pay attention in the commissioning or improvement of services. They have special relevance for local policy-making and depend on the ability to obtain and use local data. Being explicit about the data required may have the added benefit of encouraging the collection of such data. Since these measures are new and not currently in regular

use, policy-makers will require training to understand the requirements for data collection, methods for calculation and implementation of the measures to be able to adequately utilise the full potential of PIMs.

2c. Activities

All Partners Meeting: April 16th-18th, 2007

At the 1st Project Steering Group Meeting in Manchester August 14th-15th 2006, it was agreed that a health risk common to all the countries would be identified and some real data would be found in order to move the exercise beyond the purely theoretical context.

We have identified asthma and substance misuse as conditions important to urban health and of common interest to project partners. We have obtained information about the components of the population impact measure for the health indicators for Manchester City, Greater London and England and prepared descriptions of population impacts for the health indicator for each population studied. We calculated the population impacts of increasing the uptake of methadone to reduce heroin deaths and of reducing smoking prevalence to reduce asthma events. We recognise that smoking has many more harmful effects than on asthma, and that asthma has many other determining factors than that of smoking, however this example was chosen to illustrate the methodology.

Data required for PIN-ER-t (for Manchester City, Greater London and England and for both sexes separately):

- Population size
- Incidence of asthma
- Prevalence of smoking
- The degree of asthma risk from the presence of smoking, i.e. relative risk

Data required for NEPP (for Manchester City, Greater London and England):

- Population size
- Current methadone treatment rate for heroin users
- Proportion of heroin users adhering to methadone treatment
- Prevalence of methadone use
- The degree of the benefit, in terms of mortality, resulting from the methadone treatment, i.e. relative risk reduction (from literature)

Calculations indicated that 61, 1198 and 7723 asthma cases in Manchester City, Greater London and England, respectively each year, were attributable to smoking prevalence of above 20%. If the methadone treatment uptake rate is increased from the current situation to 90%, it is expected that 91, 1838 and 9612 heroin user deaths would be prevented in Manchester City, Greater London and England, respectively each year. The differences between the figures reflect only the differences in the population sizes as asthma incidence are assumed to be same for all three locations.

Following the successful presentation and discussion at the all partners meeting (Appendix V) the following feedback about how they would react to the presentation in this format, and how such presentation could be improved, was received from the project partners:

- It is recognised that policy-making is a complex process and presentation is only part of the whole process.
- 'PIMS are useful in demonstrating relevant health indicators as an adjunct to monitoring and policy-making.
- It is useful to translate empirical risk estimates and knowledge of experts into real indicators, including costs, which may help policy-makers.
- In the context of vaccination programmes, PIMs may influence vaccine manufacturing by investigating morbidity profiles between cities.
- PIMs are helpful for use in local settings, may be used to justify policy or as a teaching tool for policy-makers.

- They can be used to make a case for areas that are underfunded.
- Multiple outcomes for the same intervention can be studied.
- PIMs could be developed to obtain time evolution models.
- PIMs are not helpful for every urban health indicator e.g. affect of green spaces.
- The relevant literature and data can be difficult to obtain. The evidence base for many interventions may not be available.
- It will require training to get people to use and understand PIMs. A package including the use, advantages and limitations would be helpful.

The partners felt that the examples demonstrated should be published in a peer-review journal.

Use of PIMs in Substance Misuse: Publication

An article –based on the work explained above- is drafted, and will be submitted to a peer reviewed journal. A description of PIMs and discussion of the advantages and limitations of their utilization in decision-making are also included.

Steering Group Meeting: September 28th-October 1st, 2007

At the All Partners Meeting it was decided that same calculations as above would be made for a number of selected partner countries and their selected urban areas. We explored the data availability and analysed the obtained data from selected partner countries to calculate PIMs, again for asthma and substance misuse as exemplars. The data required to produce the PIM figures were partly available at national-and/or urban area-level, although not always for the desired age groups and by sex (Appendix-VI).

The report discussing the results for five member countries was presented to the project partners for feedback. One partner commented on the asthma incidence figures from two countries for being unrealistically high. This comment is taken into consideration and asthma incidence rates have been replaced with more reliable figures from the literature (Appendix-VII).

It was also pointed out that the RR (or RRR) may differ substantially from one study to another and this would affect the reliability of the calculated PIMs.

2d Demonstration tables for Population Impact Measures

The following tables are presented here to demonstrate the calculation of the two PIMs and are based on the calculations, which were presented in the All Partners and Steering Group meetings (Appendix-V and VI); the formulae, given in section 1.2.3., have been applied to the local data.

Table-1: Population Impact Number of Eliminating a Risk Factor: How many asthma events would be prevented in selected European cities if cigarette smoking were reduced to the lowest level found in England (i.e. 20% for females and 23% for males)

	Formula	North Rhine- Westphalia State (NRW) (Germany)	Utrecht (Netherlands)	Oslo (Norway)	Maribor (Slovenia)	Manchester City (UK)
Population size	N	10 837 804	179 862	408 174	50 873	222 862
Smoking prevalence by sex	I _p	0.31 (M) 0.23 (F)	0.38 (M) 0.30 (F)	0.23 (M) 0.21 (F)	0.31 (M) 0.21 (F)	0.26 (M) 0.23 (F)
*Asthma incidence by sex	Р	0.0015 (M) 0.0029 (F)	0.0015 (M) 0.0029 (F)	0.0015 (M) 0.0029 (F)	0.0015 (M) 0.0029 (F)	0.0015 (M) 0.0029 (F)

Relative risk	RR	1.03 (M)	1.03 (M)	1.03 (M)	1.03 (M)	1.03 (M)
		1.32 (F)	1.32 (F)	1.32 (F)	1.32 (F)	1.32 (F)
+Number of	n*l _p *	24 (M)	1 (M)	0 (M)	0 (M)	1 (M)
asthma events prevented in	p(RR-1)	368 (F)	19 (F)	5 (F)	1 (F)	27(F)
the next year	1+	Total =392	Total = 20	Total =5	Total = 1	Total = 28
,	p(RR-1)	(3.6 per 105)	(11.3 per 105)	(1.2 per 105)	(1.8 per 105)	(12.6 per 105)

^{*}Incidence rates are estimates based on RHINE study (10), taking into account the comment from a partner as explained in section 2.2., paragraph 2

Table-2: Population Impact of an Intervention: How many deaths would be prevented in the population in 1 year by increasing the use of methadone treatment from 62% to 90%

	Formula	Manchester City	Greater London	England
Population size	N	263 121	4 915 124	32 053 017
Prevalence of opiate use	P _d	0.00984	0.01064	0.00853
Baseline risk of death in the next year	r _u	0.27	0.27	0.27
Relative risk reduction following use of methadone	RRR	0.75	0.75	0.75
Proportion adhering to treatment	P _a	0.62	0.62	0.62
Difference between current levels (62%) of uptake and ideal (90% - arbitrary)	(P _b -P _t)	0.28	0.28	0.28
Proportion eligible for treatment	P _e [=(P _b -P _t)* P _a]	0.17	0.17	0.17
Number of deaths prevented in the population in 1 year	n*P _d *P _e *r _u *RRR	91	1 838	9 612

3. Conclusions

- We have demonstrated that PIMs are easy to calculate when the data and literature are available.
- The PIMs bring the two types of information, i.e. local data and research findings, together to produce straightforward measures, which will guide policy-makers in evidence-based decision-making.
- There are concerns that reliable data, especially the local data, may not be available to populate the formulae.
- Any reliability or generalisability issues with RR(R) and incidence or prevalence rates will inevitably have an impact on the reliability of the produced local PIM figures.

⁺Diagnosed new asthma events; causality is assumed between smoking and asthma

4. Recommendations

- Population Impact Measures have a potential role in helping with the implementation of health indicators into policy, and should be included amongst the methods of presentation of indicators of urban health
- Further work should be undertaken to help understand the bureaucratic and political processes that go into policy-making and the role of the type, and method of presentation of health indicators to inform this process

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WP9 supplementary study

The use of data in urban health policy making: A qualitative study

1. Introduction

This project used semi-structured interviews to investigate how data is used to inform decisions on urban health, the use of aggregate tools in decision making and the barriers in using evidence based policy-making within several European cities. In this paper we present the results from the quantitative data that was collected during the interviews. We describe the geographical level at which data is collected and decisions are made as well as the type of data used to inform policy and the participants views on the use of data in policy making within their urban area.

2. Methods

Semi-structured interviews were undertaken with representatives from 9 European countries. Prior to the interview we presented a short introduction to aggregate measures to familiarise the interviewees with aggregate measures used in health policy. Interviews were taped and transcribed. This report describes the quantitative data that were gathered during the interview. Where more than one interviewee took part in the interview we recorded quantitative data at the city level so we only had one response for each city.

3. Results

Interviews were conducted in 9 cities in 8 European countries and a total of 20 subjects participated in the interviews (Table 1).

Table 1: Countries, cities and participants

Country	City	Number of Participants	Number of Institutions
Austria	Vienna	2	2
Finland	Helsinki	1	1
The Netherlands	Amsterdam	1	1
The Netherlands	Utrecht	2	1
Latvia	Riga	2	2
Malta	Valletta	2	1
Slovakia	Kosice	4	4
Spain	Madrid	3	1
UK	Manchester	3	3

The participants tended to be employed in their regional health office and were involved in aspects of health policy in a research or advisory capacity. Few of the participants actually made policies but many of them contributed data to the policy makers and were involved in implementing policy. The participants represented 16 different institutions 9 of these institutions had been restructured in the past 5 years. The average number of years in post was 6.75 however this ranged from less than 1 to 22.

10 (50%) of the participants were aged 45-54, 4 (20%) were aged over 55, 4 (20%) were aged under 35 and 2 were aged 35-44. 8 (40%) were female and 12 (60%) were male.

Table 2 shows the level at which health policy decisions are usually made in each of the cities. For almost all cities health policy decisions were made at the national level, very few decisions were made at the regional level but for several cities decisions were made at the city level.

Table 2: Geographical area at which the majority of health policy decisions are taken

	National	Regional	City
Vienna	Yes	No	Yes
Helsinki	Yes	No	Yes
Amsterdam	Yes	No	Yes
Utrecht	Yes	No	Yes
Riga	Yes	No	No
Valletta	Yes	No	No
Kosice	Yes	No	Yes
Madrid	No	Yes	No
Manchester	Yes	No	Yes

Table 3: Types of data used to inform decisions within the 9 cities

Type of data	Number of cities
Prevalence	9
Incidence	9
Mortality	9
Hospital Episodes	8
Life Expectancy	9
Healthy Life Years	4
DALYs	2
QALYs	1
Published Literature	8
Economic Analyses	7
Health Impact Measures	3
Other data	9

All cities used standard measures such as prevalence, incidence, mortality and life expectancy to inform decisions. Very few cities used more complex measures such as DALYs, QALYs and health impact measures. All cities commented that they used other data in addition to those on the list. Often the 'other' data that was used was survey data but most surveys were conducted at the national level and data for the urban area was sparse.

Table 4 describes the level at which data were available for each of the cities. Data were available at national level for all 9 cities, and all cities had data at either regional, city or local level as well as nationally. Regional data was available for 7 cities, city data was available for 8 cities and sub-urban data was available for 7 cities.

Table 4: Geographical area at which data are available

	National	Regional	City	Sub-Urban
Vienna	Yes	Yes	Yes	No
Helsinki	Yes	Yes	Yes	Yes
Amsterdam	Yes	No	Yes	Yes
Utrecht	Yes	No	Yes	Yes
Riga	Yes	Yes	Yes	Yes
Valletta	Yes	Yes	Yes	Yes
Kosice	Yes	Yes	Yes	Yes
Madrid	Yes	Yes	Yes	Yes
Manchester	Yes	Yes	No	No

Table 5 describes the participants views on the use of data in policy making. All respondents commented that their city used summary measures when making health policy decisions and all but one commented that they used aggregate measures when making health policy decisions. Just over half of the respondents felt that they would like to have more freedom to make decisions that affected their city and all but one felt that they would use more information if it was available. Many respondents commented that they felt there was a lot of data collected but very little of it was used.

Table 5: Participants views on use of data in policy making

	Yes	No	Don't know
Do you currently use summary measures when making health policy decisions	9	0	0
Would you like to use summary measures when making health policy decisions	9	0	0
Do you currently use aggregate measures when making health policy decisions	8	1	0
Would you like to use aggregate measures when making health policy decisions	8	0	1
Would you like to have more freedom to make decisions that affect your city	5	4	0
Do you think you would use more information to help you make decisions if that information was available	8	1	0

4. Conclusion

In all cities aggregate measures were well received and participants thought that aggregate measures could help in informing decision makers. However the respondents felt that they would need help to construct, interpret and communicate these measures to politicians and decision makers. More research is needed to evaluate how we can improve the use of data in informing urban health policy.

WP10 Description of urban health indicator system Summary

This Work Package report contains three parts. First (Part 1 below) is to take the set of urban health indicators developed in previous Work packages in this project, and the information from each country in response to the questionnaire on availability, and produce a final set of indicators which could form the basis of an urban health indicator system. A final list of 39 Urban Health Indicators and their definitions is included – URHIS 39. Second (Part 2 below) is a detailed study of the process of urban health data collection, involving qualitative surveys, to help refine the issues surrounding the identification of sources and of collection of the data required to populate the indicators. Third (Part 3 below) is the report of the final conference which tackled the issue of how to implement a system for the collection and use of urban health indicators.

The Work package concludes that, despite the existence of a number of barriers to the collection of data, the project has succeeded in identifying a set of carefully constructed Urban Health Indicators, has identified the utility of using these and their availability, and has gained an enhanced knowledge of how urban health data are used and routinely collected across Europe. A number of ways in which the indicators might be incorporated into an EU wide system of urban health indicators have also been identified.

Main Report

1. Introduction

The Euro-URHIS project title is "European system of urban health indicators", corresponding to the Priority area 1 - Health information, Action: 1.1. - Developing and co-ordinating the health information and knowledge system.

Summarising, the EU Public Health Programme work plan 2005 identified the development of an urban health indicator system as an essential part of a comprehensive and integrated EU health information and knowledge system.

Through active involvement of national authorities and experts, the project contributes to the development of a sustainable urban health information and knowledge system. This urban health information system supports policy-making, identifies and prioritises urban health problems on the basis of evidence and enables the monitoring of the effects of actions taken to address them. In addition, the project enhances timely access to information, facilitates communication with the public and contributes in building advocacy, communication and education strategies. Finally, by using standardized methodology for data collection, processing and dissemination, transnational comparisons and time trend analyses become feasible.

The project used initially the well-developed ECHI health monitoring framework, but it also explored the need to include new data categories and to develop new health indicators that could provide a better description of urban health across EU member states. It also analysed the information needs of current urban health policies and actions to define indicators necessary for monitoring these policies. A set of urban health indicators were developed and refined in previous Work Packages, leading to a set of 45 items – URHIS 45.

A detailed and comprehensive questionnaire was developed in order to collect information from all member states about the availability of these indicators and feasibility of collecting them. The questionnaire was piloted and validated. We identified expert informants in each member state to collect information for his/her country using the questionnaire. The survey collected geographical, political and administrative information such as:

- Responsibility and decision making at urban level for health and healthcare issues (health and social policy and management, health promotion, public health reporting)
- Boundary stability

- Population definition
- Correspondence with NUTS classification
- Existence of local information systems
- Basic demographic and geographical characteristics of urban areas
- Data availability (using the ECHI framework)

The above-mentioned provided the information to compile country summary reports to be validated by the country informants. This leaded to a cross-EU inventory, which allows transnational comparisons and benchmarking.

The major work of WP 10 was to take this set of indicators, and the information from each country in response to the questionnaire on availability, and produce a final set of indicators which could form the basis of an urban health indicator system.

The General objectives of the project were focused on developing a comprehensive urban health information and knowledge system to:

- 1. Help to identify and prioritise urban health problems
- 2. Enable the monitoring of the effects of actions taken to address them
- 3. Ensure timely access to information
- 4. Contribute in building advocacy, communication and education strategies
- 5. Use standardized methodology for data collection, processing and dissemination, allowing transnational comparisons and time trend analysis

Work package n° 10 'Description of urban health indicator system' is the final WP of the EURO-URHIS study project. WP10 includes the original objectives for the WP, linking this Report to these objectives.

List of partners involved

- Romania Ioan Bocsan (WP Leader)
- Romania Ivan Aurel (replaced by Doina Petri)
- Romania Doina Azoicai
- Romania Maria Irina Brumboiu Romania
- Lithuania Jurante Klumbiene
- Slovenia Igor Krampac
- Slovakia Iveta Rajnicova
- Czech Republic Jana Brozova
- Czech Republic Daniela Simonova (nee Vesecka)
- Liverpool Sefton Chris Birt
- Liverpool University Jude Robinson
- Manchester Alexis Macherianakis

The WP10 had two main objectives:

- to describe the methodology to implement a self-sustainable urban health database model
- to stay linked to Specific Objectives 2 and 4 of the project

2. Description of work

The information collected have been analysed and comparisons made between member states and candidate countries to identify gaps. We described the data required to be collected, the methods/ instruments to be used, the gaps in data that would require more work, how best to collect information routinely (e.g. using health examination / interview survey modules), and how to become self-sustained. We assessed the feasibility of data collection through existing routinely available data sources/ surveys & described a minimum dataset that could be collected across all member states.

The development of a comprehensive and sustainable urban health information and knowledge system, involving a wide range of member states, is expected to enable the assessment of the effects of actions funded by national and EU funding. It is capable to provide the timely information for the publication of urban health status reports in areas of interest, allowing transnational comparisons & time trend analysis to support health policy and planning. It supports the development of advocacy, communication and education strategies.

Based on expert opinion & information collected throughout the project, the methods to develop and implement an urban health information database model will be described.

3. Deliverables

D10.1 Final work package report

This WP is linked to all the WPs and especially to WP2 (project dissemination, WP7

(Data collection), WP8 (Country summary reports), WP4 (Literature review and

appraisal) and WP5 (Definition of urban areas and populations).

Part 1: Refining the list of indicators.

The WP was scheduled to run from month 13 to month 24 (the end) of the project. The WP10 team from the very beginning included members from several member states (MS), including public health specialists from Romania (WP leader and three members), Lithuania (1 member), Slovenia (1 member), Slovakia (1 member), Czech Republic (2 members), UK (3 members). The first personnel problem was the retirement of one Romanian member (Professor Aurel Ivan), who was replaced by another Romanian specialist (Dr Doina Petri).

4. Activities

The activities of WP 10 were outlined and scheduled, as according to the original project proposal (p. 58: "Description of work"), to each member of this team as soon as they came back from their 2007 summer vacations. A teleconference was organised in early September 2007, so that methodological and procedural issues could be discussed by all members of the team. The leaders of all linked WPs (WP 2, 4, 5, 7, and 8) were also invited to attend that teleconference.

WP10 represents the final outcome of the entire project, and it includes a synthesis of data provided from most of the other WPs. In principle, its activities were expected to start when activities of previous WPs had accomplished; the results from these WPs represent the starting point for most WP10 activities. However, WP10 activities started even before this; many early telephone calls took place and e-mail messages exchanged in order to make sure that the activities in the frame of WP 10 would run appropriately. In early October 2007, on the occasion of the 10th Gastein Health Forum, Christopher Birt and Ioan Bocsan used part of their time there to agree procedures and to schedule the timetable of activities to be accomplished within this WP. Soon after this, Ioan Bocsan invited to Cluj-Napoca, Romania, his Romanian co-workers from Iasi (Pr Doina Azoicai), Bistrita (Dr Doina Petri) and Cluj-Napoca (Assoc. Pr. Maria Irina Brumboiu); that one-day meeting was held on 20 October 2007, and its main objectives were to discuss, to schedule and to agree the plan of action for the first meeting of the Romanian group (to be joined by Christopher Birt) in early December 2007, on the occasion of the Open Days of the University of Medicine and Pharmacy of Cluj-Napoca; in practice this meeting of October 20, 2007, took the form of a preliminary workshop.

The meeting of 4-7 December 2007 provided the opportunity for an excellent preparatory workshop, prior to a more definitive final WP 10 workshop, which was planned to be held in Bistrita, Romania, in early February 2008 (see below). The (February) workshop programme was established taking account of the need for appropriate technical resources (e.g. meeting rooms, video facilities, etc.), as well as the needs of participants and invited guests (e.g. translation, transportation, accommodation, etc.), also taking account of plans for advertising, contact / meetings with local (healthcare, administration, politics) and academic

officials, social programme etc. In December 2007 Christopher Birt had had a meeting with Professor Marius Bojita, the Rector of the University of Medicine and Pharmacy of Cluj-Napoca, Romania, when the successful role of the host University, in organising these two meetings in particular, had been noted.

Meanwhile, simultaneously and subsequently, further work in support of WP 10 was carried out by Jude Robinson and colleagues in the University of Liverpool; this was designed, by means of questionnaires sent to all the WP 7 respondents from urban areas across Europe, to find out more information concerning data sources, data availability, etc. The aims of this study were to:

"explore the process of how people participating in the EURO-URHIS project in 31 countries across Europe identified the sources of data for urban health indicators required to complete the EURO-URHIS 45 within their country, with particular attention to the processes of:

- · identifying the location of data sources within their country, and
- accessing the information i.e. using existing knowledge, web searches, formal and informal contacts, and any barriers to their access."

A full report of this work (completed in June 2008) is provided as a supplementary report below.

The definitive February WP 10 workshop was held in the city of Bistrita, Romania, from 4 to 8 of February, 2008. Unfortunately, a few weeks before then, the Czech partners became unavailable for administrative reasons (see below), and then the Slovak partner became unavailable – for health reasons – to attend the Bistrita final meeting.

- Those able to attend and who participated included:
- from UK: Christopher Birt, Angela Pilkington, and Matthieu Pegorie
- from Slovenia: Igor Krampac;
- from Lithuania: Jurate Klumbiene;
- from Norway: Heidi Lyshol;
- from Romania: Maria Irina Brumboiu, Doina Azoicai, Doina Petri and Ioan Bocsan

Following formal ceremonies with local dignitaries, and interviews with local media organisations, the workshop proper was opened on 4th February at 11.00 by loan Bocsan and Christopher Birt. Ioan and Chris presented their proposed methods of working, as discussed at the meetings in Bad Hofgastein in October and in Cluj-Napoca in December. Accordingly, that morning there was agreement to adopt this approach, and the tasks to be accomplished, and the means of achieving these were noted and agreed. In the afternoon further details of methodology and procedures of working were agreed, following which Angela Pilkington and Heidi Lyshol gave an overview of the preceding phases of the project, recalling its main overall objectives, the manner in which information on data availability had been collected, and details of the differing natures of the three subsequent databases which had been established. In the evening there was an informal reception.

On Tuesday, February 5, 2008, five small groups (two people each) were established, each group being allocated 9 of the 45 urban health indicators (UHIs) to analyse; for each UHI, the groups studied the following questions and issues:

- Had all respondents understood the UHI similarly? If not, what were the variations in interpretation of it?
- How many respondents reported access to the appropriate data?
- Was the UHI definition provided appropriate, or were other definitions in use? If so, did
 a substantial proportion of respondents use one particular alternative definition?
- Did respondents generally find this UHI relevant, in the context of urban health?
- Was there evidence that any alternative indicator (in the same public health domain) had been generally preferred?
- If substantial numbers of respondents reported absence of appropriate data, how
 might this (or comparable data) be obtained in future? Would use of random sample
 population surveys (e.g. by use of questionnaires on a regular basis) be relevant?

Work continued in this manner in groups during that day (Tuesday), on Wednesday 6th, and during the morning of Thursday 7th, with regular meetings each day (usually in the afternoons) to share and to discuss issues / problems / questions, etc., which had arisen during this work. On Wednesday evening, starting at 17.00, a special social programme was scheduled, supported by local organisers, including a visit to the Sangeorz Bai contemporary art museum, where a folk music and dance programme preceded a group dinner.

During the afternoon of Thursday 7th and on Friday 8th, all groups recombined to consider together, in respect of each UHI, and in the light of the report on it from the earlier group work, how to respond to the following questions and issues:

- Should this UHI be retained?
- If so, should we consider its retention in an amended form (e.g. by adopting an alternative definition)?
- How might data most satisfactorily be obtained in respect of the preferred definition?
- In the situation where there appeared to be no satisfactory answers to these questions, should we agree that this particular UHI is unsuitable for further use or development?

After completion of this process for all UHIs, the following next series of issues were addressed, as follows:

- Which UHIs from the original 45 should survive?
- Would these survivors contribute to a comprehensive, meaningful and relevant dataset of UHIs?
- If not where are the gaps? What new UHIs / areas of data may be in need of development?
- Of surviving recommended UHIs, which methods of data collection or retrieval should be recommended for use in further work:
- As assumed within EURO URHIS 1 methodology (i.e. from existing routine sources of data)?
- By use of routine submission of questionnaires to random samples of urban populations?
- Other means, to be defined?

The next stage was to indicate the agenda for future research and service development.

Research-related matters

- Identification of gaps in the surviving recommended dataset in need of being filled.
- Evidence of the types of indicators which might be required, data requirements for such indicators, methods of data collection, etc., and the development and piloting of instruments.

Service-related matters

- Development of an improved data collection instrument based upon that used for EURO-URHIS.
- Development of improved guidance for completion of this instrument (including possible translation into other languages?).
- Identification of a core instrument for use in random population surveys.
- Arrangements for translation of such a core survey instrument, and the piloting of translated versions.
- Refinement of the definition of metropolitan urban areas (conurbations).
- Development of the most up-to-date available user-friendly IT applications to assist data collection of all types.

Decisions and recommendations on the 45 UHIs were as presented in Appendix I, and a final list of 39 UHIs and their definitions is included as Appendix III.

5. Subjects to be considered for inclusion in any future population survey instrument:

It was agreed that instruments for such survey work might usefully include questions on:

- 1. Employment, unemployed status, etc.
- 2. Homelessness (e.g. ever homeless for more than a week).
- 3. Asthma diagnosis prevalence.
- 4. COPD diagnosis prevalence.
- 5. Self-perceived general health.
- 6. Health-related limitations of activities.
- 7. Tobacco use.
- 8. Alcohol consumption.
- 9. Fruit and vegetable consumption.
- 10. Quality of housing (e.g. damp housing prevalence, etc.).

6. Gaps in the remaining recommended dataset: the development agenda

It was agreed that considerable development work is indicated, particularly to identify:

- 1. Acceptable methodologies for population projections.
- 2. Means of monitoring migration into / out of urban areas.
- 3. Indicators of mental health and illness.
- 4. Indicators of quality of housing.
- 5. Registers of prevalence of chronic diseases (perhaps in a primary care context).

Part 2: Exploring the process of the identification of sources of urban health indicator (UHI) data

This piece of qualitative research was designed to elicit responses from all participating partners, as well as the contacts within each of the participating countries, regarding their knowledge of the sources of urban health data required to complete the Euro-URHIS 45, and any barriers and/ or problems they experienced when doing so. This work highlighted a number of issues involved with the identification of data sources, many of which were common across European countries and are therefore likely to relate to other research on comparable topics. However, despite the existence of these barriers, and some problems with the international comparability of questions to elicit information, data collection was completed for many of the indicators. Therefore the project has succeeded in identifying both the utility of using some Urban Health Indicators and the availability of data, and has gained an enhanced knowledge of how urban health data are used and routinely collected across Europe.

The full report is attached as a supplementary report below.

Part 3: Information derived from the final conference

The objectives of the final conference were to present a system of urban health indicators to policy makers and users of data:-

- To increase the awareness of the need of urban health indicators
- To obtain feedback, suggestion and revisions of the EURO-URHIS indicators
- To develop a plan for implementation of an urban health indicator system
- To advocate inclusion of urban health in all policies

The conference identified ways in which the indicators might be incorporated into an EU wide system of urban health indicators. Feedback from the conference showed that all delegates felt the conference had increased

awareness of urban health indicators, 89% felt the findings of the EURO-URHIS project would be helpful to policy makers and 86% felt that there was now enough evidence to support inclusion of urban health in all policies. The EURO-URHIS indicators were deemed by all delegates to be useful and not requiring revision despite the need for further development work on additional indicators and methods of implementation. Many different strategies for the implementation of UHIs were discussed through future projects including EURO-URHIS 2, continuing the EURO-URHIS network and formation of a sub-national working group.

The full conference report is attached as Appendix IV.

Conclusion

The report of this workpackage, including the detailed work described fully in the supplementary report below, all of which is made possible only by the excellent work carried out in earlier EURO-URHIS workpackages, indicates that, while a robust system of European urban health indicators almost certainly can be constructed, such construction remains very much "work in progress". However, this report does also provide indications for the direction of the next stages of this development work.

WP10 Supplementary Report: Exploring the process of the identification of sources of urban health indicator (UHI) data in 31 European Countries.

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1. Background

1a The Euro-URHIS Project

The aim of this project is develop a comprehensive urban health information and knowledge system, in order to:

- Help to identify and prioritise urban health problems
- Enable the monitoring of the effects of actions taken to address them
- Ensure timely access to information
- · Contribute in building advocacy, communication and education strategies
- Use standardized methodology for data collection, processing and dissemination, allowing trans-national comparisons and time trend analysis

1b The present study

During the development of the data collection instrument, the Euro-URHIS 45, in Work Package 6 (WP6) members of the Euro-URHIS team became aware of barriers experienced by Partners when they attempted to locate the required sources of urban health information within their country. The work of Work Package 7 (WP7) confirmed this, as the process of locating partners and contacts in each EU Member State who have knowledge of, and access to, all of the urban health data required to complete the Euro-URHIS 45 (MS) was particularly challenging.

Although WP6 and WP7 have been keeping a record of any comments about the barriers (structural, cultural, social etc.) experienced by people when trying to accessing the data we require, such as those made by partners and contacts returning the data collection forms, these valuable data have not been elicited in a systematic way, and so there are likely to be substantial gaps in our knowledge. It is therefore important to the success of this project, and for successive projects, to understand in each participating country, not only what urban health data are available, but who knows about particular sources of data, and who does not, so we can assess the implications of this for the future collection and use of urban health data across and within EU Member States.

This piece of qualitative research was designed to elicit responses from all participating partners, as well as the contacts within each of the participating countries, regarding their knowledge of the sources of urban health data required to complete the Euro-URHIS 45, and any barriers and/ or problems they experienced when doing so. This additional work enables Work Package 10 (WP10) to report more fully on their stated objectives:

Based on expert opinion & information collected throughout the project, the methods to develop and implement an urban health information database model will be described... how best to collect data routinely... and how to become self-sustained. We will assess the feasibility of data collection through existing routinely collected data sources/ surveys (5.10. Workpackage n.10: Description of urban health indicator system. Euro-URHIS, Annex 1 – Description of Work. P.31)

The aim of this study is to explore the process of how people participating in the EURO-URHIS project in 31 countries across Europe identified the sources of data for urban health indicators required to complete the EURO-URHIS 45 within their country, with particular attention to the processes of:

- · identifying the location of data sources within their country, and
- accessing the information i.e. using existing knowledge, web searches, accessing formal and informal contacts, and any barriers to their access.

2 Research Team

The research was conducted by Jude Robinson and Mona Killey, at the Health and Community Care Research Unit (HaCCRU) at the University of Liverpool. Also involved in the planning of the research were Lesley Patterson, University of Manchester, and Ifeoma Onyia and Angela Pilkington, Sefton Primary Care Trust.

3. Study design and methods

3a Questions via email

Invitations to take part in this research project were sent by email at the beginning of February 2008 to key contacts in 26 EU countries, and in 3 candidate EU and 2 EEA countries. The aim of the study was to get a response from at least one individual in each country and using the key contacts listed in the WP7 data base, a total 51 individuals were contacted, although it was made clear to them, that a single or collective response from one representative from their country would be acceptable for the purposes of the research.

The invitation included a brief outline of the study, the list of questions associated with this study, and details of who to contact for further information. Participants were reassured at this stage that their responses would remain confidential to the named project team (i.e. not all partners within the wider Euro-URHIS project) and any information resulting from this data collection would be anonymised prior to dissemination and publication.

Responses were received from individuals in 25 countries, including 21 EU, 2 candidates EU and two EEA countries. Table one shows the response rate of these countries as compared to the original sample.

Table 1: Numbers of EU, Candidate EU and EEA countries invited to participate and responses received.

	Number of EU countries	Number of candidate EU countries	Number of EEA countries
WP7 Data Base	26	3	2
Responses received from email questionnaire	21	2	2
Response as a % of original sample	81%	67%	100%

3b Telephone interviews

At the end of the emailed list of questions, participants were asked to indicate if they would be willing to be contacted by telephone either to clarify or further discuss particular issues raised by their response. 23 individuals agreed to subsequent contact with the research team for the purposes of a telephone interview and from this a sample of 16 individuals were invited by email to participate in a telephone interview. This sample was selected on both the basis of their responses in relation to particular issues raised, and also as a representative sample of the countries that responded to the email questions. 14 individuals responded to the invitation and a convenient time to contact them by telephone was arranged. Respondents were also sent a list of the questions at this stage so that they could look at them prior to the telephone interview. The timing of the telephone interviews ranged from 5 minutes to 45 minutes depending on what the respondent had to say regarding their experience of completing the Euro-URHIS 45 questionnaire.

4. Findings

4a Questionnaires

Questions sent via email were designed around the process of collection and assimilation of data for the purposes of completing the Euro-URHIS 45 and related to 5 different areas:

- · Ease of identification of sources of data
- Timing of data collection
- Ability to access the information required
- Impact of questionnaire design on data collection
- Experience of collection (identifying) data for specified Euro-URHIS urban areas

Finally respondents were provided with a space in which they could communicate further comments relating to their experience that was not addressed by the questions above.

Ease of identification of sources of data relating to urban indicators

For the most part individuals responsible for completing the Euro-URHIS 45 questionnaire had little problem in identifying the sources of data required. For many this was due to their familiarity with either the indicator itself or with the source of the data through their professional role. For example many of the respondents worked within the public health agencies responsible for the collection and collation of health indicators. Moreover, through their role these individuals had existing networks with the agencies responsible for other social and economic indicators, which is discussed further in section 4.1.3.

Problems in identifying the sources of data required occurred where the urban health indicator (UHI) was not included in official statistics. In some countries for example, Latvia, Germany, Malta, and Romania the UHI was either not available, or it was not clear whether it was available, as this type of information was not routinely recorded. For Malta in particular, the size of country impacted on the nature of the limited data available. Elsewhere, for example Norway and Slovenia, the definition of the UHI provided was not consistent with the data collected in that country and thus the type of data collected on that indicator may have differed in some

countries. The problems associated with the definitions provided, and also the availability of the data in English, as commented on by some respondents were explored further in the subsequent telephone interviews.

Another problem for respondents in identifying data sources occurred where data relating to UHIs was held by numerous (in some cases up to 20) and diverse sources outside the individual's organisation. This proved time consuming for respondents as it required liaison with these sources in order to obtain the information required. Where there were multiple sources of data for one UHI it also raised the question of which source was more accurate. Some of the data held was based on estimates from populations and thus was not deemed entirely accurate by respondents. Moreover, some of these sources only collected data for internal use and the data was not routinely available, in either a published format or via the internet, outside of the institution.

Despite the problems that were experienced in identifying data sources in some countries, many of the respondents pointed out that identifying whether sources of data were available, was different from the practical activity of actually obtaining this data which had not been a requirement of the Euro-URHIS 45. Whilst for many the prospect of data extraction posed no real problems, some people reported possible barriers when the need to actually collect data arises. For example UHIs that were only available from a national data source may require disaggregation to reflect smaller areas, or data may require further working to be in the required format for collection and/or comparison. This is discussed in more detail in section 4.1.5. Some countries for example, UK, Ireland, Austria, Turkey, Slovakia, and France, reported the possibility of cost implications involved in obtaining data from various agencies and in the in the format required. Finally the issue of privacy arose in the case of reporting some health indicators, such as HIV, in countries such as Germany and Belgium, where small numbers of cases in the defined area meant that individuals might be identifiable if the data was reported. This issue was explored further with respondents during the telephone interviews.

Timing of data collection

Due to a series of unforeseen circumstances, which delayed the completion of WP6, the timing of data collection for the Euro-URHIS 45 had shifted from May – August, to over the summer months, which was considered inappropriate by respondents for two reasons:

- Firstly and for mostly as a result of the holiday period, not having the personnel to
 collect and collate the information required, or being able to contact personnel in the
 intuitions necessary, both of which led to delays in reporting the information.
- Secondly, some respondents raised the issue about timing of the most recent data sets being published and thus available for abstraction.

Most respondents felt that as long as data collection did not occur during this summer holiday period, or the Christmas holiday period, that most other periods would be appropriate for questionnaire distribution. However, some specified particular periods due to the datasets being available at differing times throughout the year. For example the period February to April was deemed appropriate by some respondents as many governmental institutions publish reports during this period and thus recent data is available. Similarly, some suggested the last quarter of the year, October to December when data from previous year would be available for extraction.

In addition to the timing of questionnaire distribution, it was flagged up that some respondents that prior or advance warning of the questionnaire might have aided data collection as this could be planned for within institutions. More time might also have been allowed for completion of the questionnaire, as a month was felt to be inadequate by some to collect and collate the information required.

When planning research of this kind, it seems reasonable to anticipate some slippage in the timetable for the research, due to factors such as changes in personnel, illness, or retirement. Therefore if key aspects of data collection are timed to end just before major European holiday periods, such as the summer, or Christmas, there should be some flexibility incorporated within the research design to enable the data collection period to be adjusted accordingly.

Ability to access information required (formal/informal networks)

For the most part respondents were able to access the information required to complete the Euro-URHIS questionnaire by utilising both their own familiarity with, or professional knowledge of appropriate data sources as discussed above. However, the need to include indicators outside of their field, such as social and economic indicators in the case of those working within public health, necessitated contact with institutions external to their own, predominantly other statutory or governmental agencies, but in some cases non-statutory or private institutions. This was achieved in part through formal contact with the necessary agencies responsible for data collection, known to respondents through their professional role. For example Croatia formed a working party of 'key players' within which they delegated the collection of the information required to the individual representing the appropriate agency. However, respondents also made extensive use of informal networks such as individuals known to them within these institutions. In particular, for some respondents formal contacts and networks had become synonymous with informal networks due to the good working relationships established over time through ongoing partnership work with these agencies.

Finally the internet was also mentioned by many respondents as a means of accessing data not available through their own institution, in particular data that was already in the public domain as a result of being published by institutions.

Impact of questionnaire design on data collection

Comments were made by respondents on two key aspects of questionnaire design. Firstly the format, which was cited as problematic by some respondents for the following reasons:

The form template prevented cut and paste options which would have been useful where the same information was required for different indicators, and might have avoided repetition in completing the questionnaire.

The form could not be reduced to subsections. Thus, when sending the form to individuals to complete a particular section the whole form had to be sent. It was felt that this not only prolonged the time taken to complete the form where information was required by different agencies, but hindered the quality of the information received where individuals had to scroll up and down to complete one section, particularly as the search function usually found in word processing documents was not available on the form.

Respondents felt that by supplying the form in different formats, for example, as a word document (without the formatting), or as a web based document and also being able to split the form into separate subsections or questions, these issues could be easily addressed.

Issues were also raised in relation the content of the questionnaire. Respondents commented that some of the definitions of UHIs were not clear enough, for example no specific times periods were defined for day time and night time noise levels. The choice of indicators selected was also questioned by some on the basis of how representative they were as a set of urban health indicators, and the conclusions that could be drawn from international comparison of these data sets. Some respondents felt that there were too many indicators included to form a definitive baseline set. In particular, the number of indicators impacted on the length of the form which was felt to be too long. Finally, whilst the inclusion of both health specific and social indicators was felt to be useful, it was suggested that the questionnaire be split into two parts to reflect the different types of indicators, thus facilitating collection of this data from different institutions.

Despite the problems connected with the length and format of the questionnaire and the UHIs themselves respondents were enthusiastic about the importance of identifying such data sets, particularly in countries where this had not been attempted previously on this level and therefore served as a resource to the institution.

Experience of collection of data for specified Euro-URHIS urban areas

In countries, such as Belgium and Slovakia, where the specified urban health area was co-terminus with administrative boundaries no problems were experienced in identifying data sets representing the population within this area. However, where the defined urban area constituted a geography which was not co-terminus with local authority or municipal boundaries, data was not always available at the level of the urban area, but

at smaller sub areas such as city, postcode or ward level. In the case of some indicators data was available at national or regional level as a result of surveys conducted to inform national statistics, and although it was perceived that theoretically this data could be extracted and assembled for the urban area this would require further work with possible cost implications as identified in question 4.1.1. However for other countries, such as Poland and Lithuania, despite data being available at a national level, where the UHI was unavailable, or not routinely collected it was therefore not available for any of the specified urban areas within that country.

The problems connected to identifying data for the defined urban area led some of the respondents to question the usefulness (to health policy) of collecting data at this level and to recommend that the urban health area should be identified on an administrative basis for two reasons: firstly for availability of the appropriate data, and secondly because of the usefulness of data collected for administrators and policy makers. This was explored further in the subsequent telephone interviews.

Further comments

On the whole respondents viewed their participation in the project as a positive experience which had provided an opportunity to learn about systems of data collection, both in their own country and other European countries.

Whilst respondents concurred that participation in this work was useful, valuable and important, identifying the increasing demand and need for health information to be available at this level for decision making, for some the process was felt to be time consuming (sometimes connected to the issues about questionnaire format and timing). In some cases the work carried out on the Euro-URHIS 45 had created conflicting priorities with other work, and as there was no remuneration attached to conducting this work, despite their enthusiasm and interest, many respondents had not been able to participate in this project or lend their support to the extent that they might have liked.

Telephone interviews

Drawing on the responses to the questionnaires above, further questions were compiled for the purposes of interviewing a smaller sample of respondents by telephone. Those individuals who responded to the invitation to take part in a telephone interview were asked questions relating to the following areas:

- 1. Problems associated with definitions provided of UHIs.
- 2. Issues of privacy in relation to smaller data sets for some UHIs.
- 3. Language barriers in the extraction of data.
- 4. Availability of data from statutory and governmental institutions and the use of networks to obtain information pertaining to data sources within these institutions.
- 5. Definition of the specified urban area and problems associated in obtaining data within this specified area.

The key issues that emerged as a result of these questions are discussed in this section.

Problems associated with definitions provided of UHIs

The problems resulting from the definitions of UHIs provided in the Euro-URHIS 45 differed for respondents. For many it was perceived that these problems occurred only with a 'reasonable minority' of the definitions provided, and that no significant differences occurred, only slight nuances. Some examples cited were in relation to health indicators where data collected in relation to mortality and life expectancy was collected in different age groups to the definition provided, and births recorded within the population related only to live births and not all births, although respondents reported that these data sets could potentially be manipulated to produce data in the required format. Moreover, where these nuances occurred within particular indicators, respondents reported that they were able to record this in the Euro-URHIS questionnaire, so that these differences were captured as part of the process of data collection.

However, for some, the problems occurring in definitions were a significant concern with potential implications for a creating a common data set of heath indicators for Europe. Respondents talked about the definitions provided 'not being precise' enough. Not only did this result in many respondents spending much of their time

allocated to the questionnaire interpreting the definitions provided, but in many cases the indicator collected was not applicable in this context because the definition differed too much. A particular problem was with data relating to nationality and it was perceived that this could be interpreted to mean different things ranging from citizenship to race/ethnicity in different European countries. Another example of where definitions were not precise enough was in the environmental indicator relating to noise levels during the day and night where times precise periods for both 'daytime' and 'night-time' had not been provided on the questionnaire. In addition, some of these indicators such as disease/ illness prevalence were based on self reported data from surveys and it remained unclear to respondents whether this type of data was acceptable within the provided definition.

Despite the fact that, following the Euro-URHIS protocol, the indicators were largely drawn from ECHI and WHO sources, some respondents felt that more precise and thorough definitions of the data could be achieved. and the lack of precision of the definitions raised questions for some respondents regarding the reliability (and validity) of the data to be used. Although the source of each individual indicator was clearly indicated on the Euro-URHIS 45, and web links to the source documents were included with the questionnaire, participants tended not to refer to them, and therefore missed the opportunity to clarify some of the issues they raised. Some respondents felt that where interpretations of the data were misunderstood, the data collected would have too greater variation and thus not be comparable on an international level, in particular where the methods and/or samples used to obtain data differed greatly, for example self reported (from surveys or questionnaires) or mandatorily recorded data (from hospital episode statistics). Finally, although the indicators not being available in the common language of the project, English, was not cited as a problem by most in obtaining the data for the relevant UHIs (as information could be translated easily), some respondents felt this could be a problem where the definition of the indicator provided in English was misinterpreted resulting in either the wrong data being provided or an existing indicator not being identified. One respondent suggested the need for ongoing support from the Euro-URHIS team, in the form a telephone or email contact, following distribution of the questionnaire in order to address any problems with definitions as they arose.

Problems associated with obtaining data within the specified Euro-URHIS area

For many respondents a bigger problem associated with completing data for the Euro URHIS 45 was obtaining data on UHIs for the specified urban area. This was frequently related to how the area had been defined by the respondents and for some this had proved a difficult and 'unscientific' task to undertake. Where the defined urban area could not relate to a pre-existing geographical or administrative boundary as a result of criteria for population level, the area had had to be built up by regional areas in order to create an 'urban area'. This in turn created problems in reducing the amount of data available, as much of the data was available only at local authority level, city or municipal level.

Thus where possible the decision relating to the specified urban area for many frequently came down to an administrative level as it was perceived that more data was available, in particular social indicator data. Where respondents had adopted this approach fewer problems in identifying indicators had been experienced, although some hospital episode statistics on indicators such as birth rates, incidence of mental health problems and HIV rates related to the cases seen in that hospital, which may relate to population residing outside of the defined urban area. In addition, whilst data relating to some indicators was not always routinely available for the defined urban area it was available at a national level, and for the most part able to be extracted relatively easily. However, in some countries it was not easy to disaggregate national sources of data for the urban area that had been defined solely for the purposes of the project.

Similarly to the problems experienced in defining the indicators it was perceived that not enough work had been conducted around defining the urban areas. Some of the criteria used were, that of inclusion in the urban audit which was not relevant to non-EU countries, or population levels which again was problematic as the required population level did not always fall within an administrative boundary. Moreover, the use of post code boundaries to define urban areas was also perceived as problematic as these systems were not consistent across all countries.

The issue of privacy in relation to smaller data sets for some UHIs also related to the definition of the urban area used. For many respondents the size of the data set relating to an indicator was dependent on the urban area defined and where this was perceived to be so small that individuals in the area might be identified the data could not be provided. For many this occurrence was rare as data was often not collated or made available to

analysts in a manner which might identify individuals, and was therefore reported in terms of incidence only, for example less than 5 cases. In addition some questioned the use of such small data sets as an indicator due to the number of cases behind the indicator being so small and the variation so great between years.

The use of professional knowledge and networks to obtain UHI information

As discussed in section 4.1.3 many of the respondents were well used to working with health indicators, and some had provided data on their country for the WHO database and other international databases previously. In addition respondents were largely familiar with the sources of data, which although for the most part were collected by government (or government controlled) agencies or institutions, were extensive and varied. Whilst many of the issues discussed by respondents about how professional and informal networks had been utilised in order to obtain information on sources of data were consistent to what had been reported in the email questions, some additional issues emerged from the telephone interviews.

In particular, respondents reported the need to establish new networks in identifying data sources for indicators they had previously been unfamiliar with. This entailed firstly identifying the organisation responsible for collection of this data, and then establishing an appropriate contact within the organisation who was able to facilitate access to the required data. For the Euro-URHIS 45 this had been relatively straightforward as the questionnaire had only required identification of the data source and not extraction of the data. In addition, these networks were now in place for subsequent work relating to extracting data for this project thus negating the need to search for data sources in the future. However, establishing networks in this way had proved time consuming due to the need to often translate the information required and reliance on individuals in these organisations responding in a timely manner and it was perceived by respondents that the issue of timing needed to be taken into account when the need to collect this data arises.

5. Conclusions

It is important to recognise that in this context, data collection is an interpretative rather than a purely mechanistic process, and that the individuals completing the questionnaires brought their own experiences, contacts, and professional world view into play when they undertook to provided the data requested by the Euro-URHIS research team. Prior knowledge and expertise, social and professional contacts, competence in written English, and personal ingenuity all seem to have played a part in the interpretation of questions, the identification of sources, and the method of recording these responses. While such factors cannot be eliminated, they can at least be identified and understood to enable future research to minimise their impact on data collection.

The Euro-URHIS project was set up to explore the availability of existing health indicators relating to urban health across Europe, and to assess the feasibility of collecting any available data in the future. This closer study of the process of urban health data collection highlights a number of issues involved with the identification of data sources, many of which were common across European countries and are therefore likely to relate to other research on comparable topics. Key learning points for future research relate to the format of the data collection instrument; the difficulty of identifying sources of data across health and social care boundaries and of accessing data from non-governmental sources; the timing of the research; the use of existing health indicators in the questionnaire; and the definition of urban areas.

However what is notable from this additional research is that despite the existence of these barriers, data collection was completed for many of the indicators. Furthermore the participants were able to use the open comment sections, included in the Euro-URHIS questionnaire for this specific purpose, to clarify their concerns about the data they had included, and so alert the project team to potential issues with the data provided. Therefore the project has succeeded in identifying both the utility of using some UHIs and the availability of data, and has gained an enhanced knowledge of how urban health data are used and routinely collected across Europe.

APPENDICES I - VIII

Appendix I: Urban Health Indicators

Decisions and recommendations on the 45 UHIs are as follows:

UHI 1: Population by age and gender:

Definition: population in numbers and % presented by gender, and age bands: 0-4, 5-14, 15-19, 20-24, 25-54, 55-64, 65-74, 75+ years.

These data are collected in two different ways in European countries.

Decision: this UHI is understood, relevant data are collectable, and it is recommended, but with the definition amended so as to read as follows: population in numbers and %, as derived either from registered populations or from census data, presented by gender, and age bands: 0-4, 5-14, 15-19, 20-24, 25-54, 55-64, 65-74, 75+ years.

UHI 2: Population by nationality:

Definition: population in numbers and %, by nationality.

This definition was widely misunderstood; it was usually understood (as intended) to indicate citizenship, but also in many cases it was assumed to refer to ethnicity.

Decision: the word nationality in the definition should be replaced by the word citizenship. Otherwise, this UHI is understood, relevant data are collectable, and it is recommended (as amended).

UHI 3: Birth rate:

Definition: number of live births per 1,000 persons.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 4: Population projections:

Definition: projections of the population in the EURO-URHIS urban area up to the years 2015, 2025, and 2050.

Such projections are not calculated at all in many countries, and where they are collected, no consistency of approach is apparent.

Decision: it is recommended that this UHI should be removed from the EURO-URHIS list of recommended UHIs; however it is recommended that a methodology and practice regarding population projections, of a nature acceptable to European urban centres, should be a high development priority in future work.

UHI 5: Population per square km.

Definition: average population density per square km.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 6: Migration:

6a: Migration by nationals to the EURO-URHIS urban area.

Definition: nationals from this country that have moved to the urban area during the last two years, as a % of the total population of the urban area.

6b: Migration by EU nationals to the EURO-URHIS urban area.

Definition: EU nationals from countries other than this country that have moved to the urban area during the last two years, as a % of the total population of the urban area.

6c: Migration by non-EU nationals to the EURO-URHIS urban area.

Definition: non-EU nationals that have moved to the urban area during the last two years as a % of the total population of the urban area.

Owing to free movement of people within the EU (especially in the Schengen area, etc.), urban areas generally have no means of collecting data relevant to 6a or 6b; as details of non-EU migrants are collected (through visa arrangements, etc.), data relevant to 6c can be collected.

Decision: it is recommended that UHIs 6a and 6b should be removed from the EURO-URHIS list of recommended UHIs, but that UHI 6c is understood, relevant data for this are collectable, and it should be retained, but with the definition amended as follows, so as to read: non-EU nationals, by country of origin, that have moved to the urban area during the last two years as a % of the total population of the urban area.

UHI 7: Household composition:

Definition: % of persons by gender, and age in 5 classes, defined as: (i) 1 person living alone, (ii) one parent with children, (iii) couples without children, (iv) couples with children, and (v) other.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 8: Population by education:

Definition: % in 4 classes: (i) elementary, (ii) lower secondary, (iii) upper secondary, and (iv) tertiary according to the International Standard Classification of Education.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 9: Unemployment rate:

Definition: % unemployed in the active population; long-term in 3 categories: (i) long-term, (ii) >12 months, (iii) (for 15-24 years) > 6 months (N/B include only people who are active, and both available and eligible for employment).

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form; however it is also recommended that a question on employment / unemployment should be included in a questionnaire for use in a random population survey.

UHI 10: Population living below the poverty line:

Definition: % of population with a household income below 60% of the national median income.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 11: Estimated number of homeless people:

Definition: number of people having no housing for at least 1 month over a year, not including people who live in mobile homes. Include both people who are: (i) homeless and living in hostels and shelters provided for homeless people and (ii) homeless people who are living on the streets. If possible, please provide separate figures for each category.

Few urban areas use the definition provided, as above.

Decision: it is recommended that the definition for this UHI should be modified to refer, instead of to number of people having no housing for at least 1 month over a year, instead to estimated number of people homeless for more than one week in a year; however, it is also recommended that, a question on any experience of homelessness should be included in a questionnaire for use in a random population survey.

UHI 12: Life expectancy:

Definition: mean number of years still to be lived by a person who has reached a certain exact age, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying).

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 13: Infant mortality:

Definition: ratio consisting of the number of deaths of children under one year of age during the year, to the number of live births in that year. The value is expressed per 1,000 live births.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 14: Perinatal mortality:

Definition: ratio consisting of the number of fetal deaths (over 1,000g) and early neonatal deaths (0-6 days) during the year, to the number of births in that year (including stillbirths). The value is expressed per 1,000 births.

This statistic is nowadays collected in most urban areas with reference to over 500g rather than to over 1,000g.

Decision: it is recommended that the definition for this UHI should be modified to refer, rather than to ratio consisting of the number of fetal deaths (over 1,000g), instead to ratio consisting of the number of fetal deaths (over 500g"; however, otherwise this UHI is understood, relevant data are collectable, and it is recommended as amended.

UHI 15: Low birth weight:

Definition: number of live births weighing less than 2,500g as a % of total number of live births.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 16: Mothers' age distribution:

Definition: number of births per 1,000 women presented by age band: under 15 years, 15-19, 20-24, 25-54, 55+ years. The age of the mother is defined as the age reached in the year the event took place.

Respondents in most urban areas expressed a preference to subdivide the 25-54 age group.

Decision: this UHI is understood, relevant data are collectable, but it is recommended that data should be collected for the following age bands: under 15, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50 and over.

UHI 17: Causes of death:

Definition: the most frequent causes of death (COD) including each of the ICD chapters in the tables below as a whole. Presented for age groups 0-64 and 65+ separately.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 18: Prevalence of any chronic illness:

Definition: 12-month prevalence of any chronic illness.

This UHI resulted in a wide variety of data and responses, which would have been of little use for comparative purposes.

Decision: It was agreed that further development of this UHI should be more structured, and based upon ICD chapters. Accordingly, urban areas should be asked for: 12-month prevalence of chronic illnesses in the following categories:

- 1. Cardiovascular diseases (I10-I15, I20-I25, I60-I69)
- 2. Mental disorders (F00-F99)
- 3. Endocrine disorders (E00-E39, E35-E65-E68, E70-E90)
- 4. Malignancies (C00-C97)
- 5. Chronic Pulmonary Diseases (J40-J47)
- 6. Gastrointestinal disorders (K20-K31)
- 7. Chronic liver diseases and cirrhosis (K70-K76)
- 8. Neurological disorders (G20-G41, G70-G71, G81-G82)
- 9. Musculo-skeletal disorders (M15-M19, M30-M32, M40-M45, M47, M60, M65, M80-M81)
- 10. Other conditions, including allergic conditions (L20-L54, J45-J46)

UHI 19: HIV / AIDS incidence:

Definition: number of new cases per 100,000 persons.

Many urban areas record only new cases of HIV.

Decision: this UHI is understood, some relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used should be: annual incidence of diagnosis of new cases of HIV per 100,000 persons.

UHI 20: Lung cancer incidence:

Definition: number of new cases per 100,000 persons.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 21: Breast cancer incidence:

Definition: number of new cases per 100,000 persons.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 22: Diabetes prevalence:

Definition: prevalence of all types of diabetes.

This definition caused considerable confusion; for example, was it supposed to include diabetes insipidus?

Decision: this UHI is understood (when clearly defined), relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used should be: prevalence of all types of diabetes mellitus.

UHI 23: Asthma prevalence:

Definition: number of diagnosed cases of asthma based on symptoms within the last 12 months.

Many urban centres reported difficulty in applying this definition.

Decision: this UHI is understood, relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used should be: point prevalence rate of diagnosed cases of asthma per 100,000 population; it is also recommended that a question on history of any diagnosis of asthma should be included in a questionnaire for use in a random population survey.

UHI 24: Chronic obstructive pulmonary disease (COPD) prevalence:

Definition: number of diagnosed COPD cases based on symptoms in the last 12 months.

Many urban centres reported difficulty in applying this definition.

Decision: this UHI is understood, relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used should be: point prevalence rate of the number of known cases of COPD per 100,000 population; it is also recommended that a question on history of any diagnosis of COPD should be included in a questionnaire for use in a random population survey; it was also noted that, should any future work include a survey of general practitioners on use of chronic disease registers, etc., questions on COPD should be included in this.

UHI 25: Perceived general health:

Definition: % of responses to the WHO question: "How is your health in general? Very good / Good / Fair / Bad / Very bad".

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form; however it is also recommended that a question on subjectively perceived general health should be included in a questionnaire for use in a random population survey.

UHI 26: Depression prevalence.

Definition: 12-month prevalence of depression by Composite International Diagnostic Interview (WMH-CIDI).

This instrument is used in very few European urban centres; some use other indicators, but no one diagnostic system is used in more than 2-3 centres.

Decision: it is recommended that this UHI should be removed from the EURO-URHIS list of recommended UHIs; however it is also recommended that a question on diagnosis of depressive illness, etc., should be included in a questionnaire for use in a random population survey. It is also recommended that development of indicators of mental health and illness is an urgent priority for urban health, and that such development should be given priority in future work.

UHI 27: Psychological distress:

Definition: % population below cut-off point of MHI-5 score, from SF-36 questionnaire. http://www.sf-36.org

Data of this type is collected in very few European urban centres.

Decision: it is recommended that this UHI should be removed from the EURO-URHIS list of recommended UHIs; however it is also recommended that a question on self-perceived psychological distress be considered for inclusion in a questionnaire for use in a random population survey. It is also recommended that development of indicators of mental health and illness is an urgent priority for urban health, and that such development should be given priority in future work (as recommended for UHI 26 above).

UHI 28: Health related limitations of usual activities:

Definition: % up to 3 response categories from EU-SILC question: "For at least the last six months to what extent have you been limited because of a health problem in activities people usually do? Would you say that you have been: Severely limited / Limited / Limited but not severely / Not limited?"

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form; however it is also recommended that a question on limitations of usual activities should be included in a questionnaire for use in a random population survey.

UHI 29: Road traffic injuries:

Definition: number of people injured in road traffic accidents within the EURO-URHIS urban area, who have presented to a hospital or a health centre, per 100,000 persons, aged: 0-19 years and 20+ years.

In most centres, 15 is more often used as a cut-off age than is 20 years.

Decision: this UHI is understood, relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used amended such that data would be provided for age groups: 0-6, 7-14, 15+.

UHI 30: Injuries in the workplace:

Definition: number of accidents at work per 100,000 workers, that (i) result in more than 3 days absence from work, (ii) are fatal.

Data precisely as according to this definition are not generally available in many centres, although similar data are available.

Decision: this UHI is understood, relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used amended so as to read: "number of accidents or deaths at work per 100,000 workers".

UHI 31: Regular cigarette smokers:

Definition: % daily cigarette smokers aged: 5-14, 15-19, 20-24, 25-54, 55-64, 65-74, and 75+ years.

In many centres data are not usually available for as many age groups as this.

Decision: this UHI is understood, relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used amended so as to read: % daily cigarette tobacco use by age groups 0-15 and 16+; it is also recommended that a question on use of tobacco should be included in a questionnaire for use in a random population survey.

UHI 32: Alcohol consumption:

Definition: % adolescents and adults consuming more than 3 alcoholic drinks per day (men) or more than 2 alcoholic drinks per day (women), aged: 15-19 years and 20+ years. N/B a "drink" is here defined as a recognised standard measure of spirits, or beer, or wine.

This definition is not generally used, and is considered confusing (the size of a "measure" varies from country to country – even within the UK!).

Decision: this UHI is understood, relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used amended so as to refer to units (each containing 10ml of alcohol) in place of drinks, and so that data should be collected for the age groups 0-15 and 16+; it is also recommended that a question on consumption of alcoholic drinks should be included in a questionnaire for use in a random population survey.

UHI 33: Use of cannabis:

Definition: % of people reporting use of cannabis at any point in their lifetime aged: 15-19, 20-24, 25-54 years.

Availability of data on cannabis use is limited. If comparable data is to be obtained, this is likely only to be available in many European urban centres for teenagers (as this is collected within the school context).

Decision: this UHI is understood, some relevant data are collected for some age groups, and it is recommended that it should be adopted, but that the definition to be used should be amended so as to read: % of people in the age group 11-16 reporting use of cannabis at any time; it is also recommended that a question on use of cannabis should be included in a questionnaire for use in a random population survey.

UHI 34: Breastfeeding:

Definition: % newborns (exclusively) breastfed (i) during the first 48 hours and (ii) by 6 months of age, expressed as a proportion of all newborn babies.

Most data collected do not refer to "exclusively" breastfed babies.

Decision: this UHI is understood, relevant data are collectable, and it is recommended that it should be adopted, but that the definition to be used amended so as to refer to % of babies breastfed (i) during the first 48 hours and (ii) by 6 months of age, expressed as a proportion of all newborn babies.

UHI 35: Fruit and vegetables consumption:

Definition: % population eating less than 100g of fruit and vegetables per day.

Information is not commonly available using this definition.

Decision: this UHI is understood, relevant data are collected, and it is recommended that it should be adopted, but that the definition to be used should be amended so as to read: % population eating less than 5 portions of fruit and vegetables per day; it is also recommended that a question on fruit and vegetable consumption should be included in a questionnaire for use in a random population survey.

UHI 36: Height and weight:

Definition: collection of height and weight data for Body Mass Index (BMI) calculation. The BMI is a single number that evaluates an individual's weight status in relation to height (weight / height2) with weight (without clothes and shoes) in kilograms, and height (without shoes) in meters.

Decision: this UHI is understood, relevant data are collectable, and it is recommended in unaltered form.

UHI 37: Public access to green space:

Definition: surface area of green spaces such as parks (calculated in square meters) that are open to the public, per inhabitant.

Decision: this UHI is understood, relevant data are collected, and it is recommended that it should be adopted, but that the definition to be used should be amended so as to take account of the manner in which data are collected, as follows: surface area of green spaces such as parks (calculated in hectares) that is open to the public, per inhabitant.

UHI 38: PM 10 exposure:

Definition: % urban population exposed to concentrations exceeding limit value (50 microgm. per square meter, 24 hour average) on 35 or more days.

Considerable research was required to identify a revised definition which is both meaningful and which reflects data generally collected in most centres.

Decision: this UHI is understood, relevant data are collected, and it is recommended that it should be adopted, but that the definition to be used should be amended, as follows: number of days during a calendar year in which any part of the urban population is exposed to concentrations exceeding limit value (50 ug/m3, 24 h average). This questions / UHI was subject of many discussions, and to the end it was Igor Krampach's merit to clarify issues under debate in this particular case.

UHI 39: Noise nuisance:

Definition: % population exposed to outdoor day noise levels above 55 dB(A); % population exposed to sleep disturbing outdoor night noise levels above 45 dB(A).

Few urban areas could provide data as according to this definition. This UHI requires understanding of the complex technology involved, and the matter required considerable research. However, recent EU legislation requires member states to achieve a particular standard in this area, which is measured with specific indicators. However, these have limitations: the methodology for their calculation is not standardized throughout Europe, no upper limit value has been defined by the EU commission, and they are specific to types of noise nuisance (air, road, industry): no overall indicator is used. Accordingly, the recommended UHI is provided, following expert advice, in a form consistent with this.

Decision: the definition above should be replaced with:

% population with annual average exposure to noise annoyance levels (Lden)* above limit value in the urban area,

% population with annual average exposure to noise-related sleep disturbance levels (Lnight)* above limit value in the urban area.

*as defined in Directive 2002/49/EC of the European Parliament.

UHI 40: Indoor dampness in houses:

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

Such information is collected nowhere in Europe outside countries in north west Europe.

Decision: it is recommended that this UHI should be removed from the EURO-URHIS list of recommended UHIs; however it is recommended that development of an indicator of unsuitable housing, of a nature acceptable to European urban centres, should be a high development priority in future work.

UHI 41: Vaccination of young people:

Definition: % of children who complete the nationally recommended programme for immunisation against diphtheria, pertussis, poliomyelitis, tetanus, HIB, hepatitis B, measles, mumps, rubella, meningococcus C.

Nationally recommended immunisation programmes in the EU vary a little between member states, accordingly the definition needs to be modified accordingly.

Decision: this UHI is understood, relevant data are collected, and it is recommended that it should be adopted, but that the definition to be used should be amended, so as to read: % of children who complete courses of immunisation against diphtheria, pertussis, poliomyelitis, tetanus, haemophilus influenzae B, hepatitis B, measles, mumps, rubella, meningococcus C.

UHI 42: Breast cancer screening:

Definition: % women aged 52-69 years receiving bilateral mammography within the past year.

These age groups do not reflect breast screening as established in many EU member states, and mammography is generally not recommended more frequently than every three years.

Decision: this UHI is understood, relevant data are collected, and it is recommended that it should be adopted, but that the definition to be used should be amended, so as to read: % of women in the following age groups receiving systematic mammography screening over the last three years: 45-49, 50-54, 55-59, 60-64, 65-69.

UHI 43: Cervical cancer screening for women:

Definition: % women aged 20-69 years old receiving cervical cancer screening within the past 3 years.

European urban centres collect data in more age groups than indicated in this definition, and more age-related data is considered valuable.

Decision: this UHI is understood, relevant data are collected, and it is recommended that it should be adopted, but that the definition to be used should be amended, so as to read: % of women in the following age groups receiving cervical cancer screening within the last three years: 15-24, 25-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69.

UHI 44: Health insurance:

Definition: % population who have health insurance, if possible, by type (public or private), etc.

This definition would be interpreted differently in different EU member states; furthermore, in most urban centres such data is not collected or available.

Decision: it is recommended that this UHI should be removed from the EURO-URHIS list of recommended UHIs.

UHI 45: Health education programmes:

Definition: health education programmes are made up of one or more projects that aim to improve knowledge, assistance and services for individuals to develop and maintain a healthy way of life. Please name the objectives of 5 current programmes that have been fully or partly financed or assisted by local government or state health organisations, or other statutory services within the defined EURO-URHIS urban area.

This UHI was considered to be too vague and open-ended to be useful for any comparative purposes, and that a more structured and closed type of question should be presented to relevant urban health education authorities (although it is realised that this would require frequent and regular revision to take account of the development of new common health education programmes, etc.).

Decision: It is recommended that the following questionnaire for this UHI should be piloted as a part of further development of the overall dataset:

Health education programmes are made up of one or more projects that aim to improve the knowledge, assistance and services for individuals and groups to develop and maintain a healthy way of life.

Below is a table listing examples of such programmes.

Please list any programmes involving citizens of your European Urban Area (EUA)

-Note that a particular programme may fit into more than one category-

Please specify the geographical level at which each programme is run.

Please specify the title of the programme and any relevant information in the 'Comment/description/reference' column.

Health education programme	Overall EUA	Part of EUA (e.g. inner city)	Regional	National	Comment/ description/ reference
Accident prevention/use of safety equipment					
Alcohol (prevention/support)					
Breast feeding					
Bullying (and other school based) programmes					
Cancer screening with information provision					
Cardio vascular health					
Children's (0-15 year old) health programmes					
Dental health					
Diabetes prevention programmes					
Drugs (prevention/support)					
Environment (air/water/toxins etc)					
Exercise					
Health programmes for the elderly					
Healthy diet					
Mental health					
Osteoporosis prevention (and management) programmes					
Parenting classes					
Pregnant women (and partners) classes					
Programmes for migrants (or other marginalised groups)					
Sexual health/STI prevention					
Smoking cessation/prevention					
Social inclusion programmes					
Sun protection programmes					
Weight control					
Youth (16-20) health programmes					
Other (add your own)					

Appendix IIA Statistical Agencies

2	Statistics agencies				
Country	Name	web adress			
Austria	Statistics Austria	http://www.statistik.at/index.shtml			
Belgium	Statistics Belgium	http://www.statbel.fgov.be/			
Cyprus	Statistical Service fo the Republic of Cyprus	http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en?OpenDocument			
Czech Republic	Czech Statistical Office	http://www.czso.cz/			
Denmark	Danmark Statistik	http://www.dst.dk/			
Estonia	Statistcs Estonia	http://www.stat.ee/			
Finland	Statistics Finland	http://www.stat.fi/index_en.html			
France	Institut national de la statistique et des études economiques	http://www.insee.fr/fr/home/home_page.asp			
	Institut national d'études démographiques	http://www.ined.fr/			
Germany	Federal Statistical Office Germany	http://www.destatis.de			
Greece	General Secretariat of National Statistical Service of Greece	http://www.statistics.gr/Main_eng.asp			
Hungary	Hungarian Central Statistical Office	http://portal.ksh.hu/portal/page?_pageid=37,115776&_dad=portal&_schema=PORTAL			
Ireland	Central Statistics Office Ireland	http://www.cso.ie/			
Italy	National Institute of Statistics	http://www.istat.it/			
Latvia	Latvijas statistika	http://www.csb.gov.lv/			
Lithuania	Department of Statistics to the Government fo the Republic fo Lithuania	http://www.std.lt/lt/			
Luxembourg	Central Service for Statistics and Economic Studies	http://www.statec.lu			
Malta	National Statistics Office Malta	http://www.nso.gov.mt/			
Poland	Central Statistical Office	http://www.stat.gov.pl/			
Portugal	Instituto Nacional de Estatística Portugal	http://www.ine.pt/			
Slovakia	Statistical Office of the Slovak Republic	http://www.statistics.sk/			
Slovenia	Statistical Office of the Republic of Slovenia	http://www.stat.si/			
Spain	Instituto Nacional de Estadística	http://www.ine.es/en/welcome_en.htm			
Sweden	Statistics Sweden	http://www.scb.se/			
The Netherlands	Statistics Netherlands	http://www.cbs.nl/en-GB/default.htm			
United Kinadom	National Statistics UK	http://www.statistics.gov.uk/			

APPENDIX IIB Country Populations

If no additional information is given, data was gathered from URBAN AUDIT (2001).

Austria		Paris et petite couronne	6,164,418
Capital			
Vienna	1,550,123	Germany	
Biggest Cities		Capital	
Vienna	1,550,123	Berlin	3,388,434
Graz	226,244	Biggest Cities	
Linz	183,504	Berlin	3,388,434
	•	Hamburg	1,726,363
Belgium		Munich	1,227,958
Capital			, ,
Brussels	973,565	Greece	
Biggest Cities		Capital	
Brussels	973,565	Athens	789,166
Antwerp	445,570	Biggest Cities	,
Gent	224,685	Athens	789,166
G.G.1.1	,000	Thessaloniki	385,406
Cyprus		Patra	171,616
Capital			,
Nicosia	200,686	Hungary	
Biggest Cities	_00,000	(so far, no official data could found out)
2.99001 01.1100		Capital	,
		Budapest	1,777,921
Czech Republic		Biggest Cities	.,,0
Capital		Budapest	1,777,921
Prague	1,169,106	Debrecen	204,700
Biggest Cities	1,100,100	Miskolc	177,800
Prague	1,169,106	Michelo	,000
Brno	376,172	Ireland	
Ostrava	316,744	Capital	
	,	Dublin	495,781
Denmark		Biggest Cities	,.
Capital		Dublin	495,781
Copenhagen	499,148	Cork	123,062
Biggest Cities		Galway	65,832
Copenhagen	499,148		,
Aarhus	286,668	Italy	
Odense	183,691	Capital	
	•	Rome	2,546,804
Estonia		Biggest Cities	,,
Capital		Rome	2,546,804
Tallinn	399,685	Milan	1,256,211
Biggest Cities	•	Naples	1,004,500
Tallinn	399,685	·	, ,
Tartu	101,207	Latvia (Latvijas statistika, 2005)	
		Capital	
Finland		Riga	731,762
Capital		Biggest Cities	
Helsinki	559,718	Riga	731,762
Biggest Cities		Daugavpils	110,379
Helsinki	559,718	Liepaja	86,264
Tampere	197,774		
Turku	559,718	Lithuania (Department of Statistics	
		Lithuania, 2005)	
France		Capital	
Capital		Vilnius	553,061
Paris	2,125,246	Biggest Cities	
Biggest Cities		Vilnius	553,061
Paris	2,125,246	Kaunas	364,059
Lyon	1,167,532	Klaip da	188,767
Lille	1,091,438		

Luxembourg		Spain	
Capital		Capital	
Luxembourg	76,688	Madrid	2,957,058
Biggest Cities		Biggest Cities	
Luxembourg	76,688	Madrid	2,957,058
		Barcelona	1,505,325
Malta		Valencia	746,612
Capital			
Valletta	363,799	Sweden	
Biggest Cities		Capital	
Valletta	363,799	Stockholm	750,348
		Biggest Cities	
Netherlands		Stockholm	750,348
Capital		Goteborg	466,990
Amsterdam	734,594	Malmo	259,579
Biggest Cities			
Amsterdam	734,594	United Kingdom	
Rotterdam	595,255	Capital	7 470 004
The Hague	442,356	London	7,172,091
		Biggest Cities	7 470 004
Poland		London	7,172,091
Capital	4 000 700	Inner London	2,766,065
Warsaw	1,609,780	Birmingham	977,087
Biggest Cities	4 000 700	Leeds	715,399
Warsaw	1,609,780	Norway (Statistics Norway, 2005)	
Lodz	786,526	Capital	500 444
Krakow	740,737	Oslo	538,411
Destand		Biggest Cities	F00 411
Portugal		Oslo	538,411
Capital	EC 1 CE 7	Bergen Trondheim	242,158
Lisbon Biggest Cities	564,657	Totaleilli	158,613
Lisbon	EG / GE 7	Romania 2004	
Porto	564,657 263,131	Capital	
	164192	Bucharest	1,927,559
Braga	104192	Biggest Cities	1,921,009
Slovakia		Bucharest	1,927,559
Capital		lasi	317,812
Bratislava	428,672	Constanta	307,447
Biggest Cities	420,072	Constanta	001,441
Bratislava	428,672	Turkey	
Kosice	236,093	(Turkey's Statistical Yearbook 2006)	
Presov	91,621	Capital	
Slovenia (Statistical Office Slovenia, 2		Ankara	3,540,552
Capital	,	Biggest Cities	2,2 .3,002
Ljubljana	269,146	Istanbul	9,085,599
Biggest Cities	_00,110	Ankara	3,540,552
Ljubljana	269,146	Izmir	2,732,669
Maribor	113,862		_,. 5_,600
Kranj	51,692		
	,		

APPENDIX IIC

List of analysed projects

N.U.R.E.C. http://www.uni-duisburg.de/duisburg/nurec.htm

COMET http://www.comet.ac.at

ESPON http://www.espon.eu

Eurocities http://www.eurocities.org/main.php

Geopolis http://www.geo.univavignon.fr/Site%20Avignon/pages/labo/geopolis%20eng/definitioneng.html

HABITAT http://www.unhabitat.org

Healthy cities http://www.healthycities.org/

Health-Inequalities http://www.health-inequalities.org/

Megapoles http://www.megapoles.com/reports.html

METREX http://www.eurometrex.org/

URBACT http://urbact.eu/

URBAN http://www.deutscher-verband.org/seiten/urban-netzwerk/default.asp

Urban audit http://www.urbanaudit.org/

Städte in Europa http://www.bbr.bund.de/nn_23494/DE/Veroeffentlichungen/Forschungen/heft115

<u>DL,templateId=raw,property=publicationFile.pdf/heft115_DL.pdf</u>

Eurostat http://epp.eurostat.ec.europa.eu

OECD http://www.oecd.org

UNO http://www.un.org

WHO http://www.who.int

APPENDIX III: Final recommended list of Urban Health Indicators and their definitions: URHIS 39

Urban health indicator no.	Urban health indicator name	Urban health indicator definition
1	Population by age and gender	population in numbers and %, as derived either from registered populations or from census data, presented by gender, and age bands: 0-4, 5-14, 15-19, 20-24, 25-54, 55-64, 65-74, 75+ years
2	Population by nationality	population in numbers and %, by citizenship
3	Birth rate	number of live births per 1,000 persons
4	Population per square km	average population density per square km
5	Migration by non-EU nationals to the EURO-URHIS urban area	non-EU nationals, by country of origin, that have moved to the urban area during the last two years as a % of the total population of the urban area
6	Household composition	% of persons by gender, and age in 5 classes, defined as: (i) 1 person living alone, (ii) one parent with children, (iii) couples without children, (iv) couples with children, and (v) other
7	Population by education	% in 4 classes: (i) elementary, (ii) lower secondary, (iii) upper secondary, and (iv) tertiary according to the International Standard Classification of Education
8	Unemployment rate	% unemployed in the active population; long-term in 3 categories: (i) long-term, (ii) >12 months, (iii) (for 15-24 years) > 6 months (N/B include only people who are active, and both available and eligible for employment)
9	Population living below the poverty line	% of population with a household income below 60% of the national median income
10	Estimated number of homeless people	number of people having no housing for at least 1 month over a year, not including people who live in mobile homes. Include both people who are: (i) homeless and living in hostels and shelters provided for homeless people and (ii) homeless people who are living on the streets. If possible, please provide separate figures for each category.
11	Life expectancy	mean number of years still to be lived by a person who has reached a certain exact age, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying).
12	Infant mortality	ratio consisting of the number of deaths of children under one year of age during the year, to the number of live births in that year. The value is expressed per 1,000 live births.
13	Perinatal mortality	ratio consisting of the number of fetal deaths (over 500g) and early neonatal deaths (0-6 days) during the year, to the number of births in that year (including stillbirths). The value is expressed per 1,000 births.
14	Low birth weight	number of live births weighing less than 2,500g as a % of total number of live births.
15	Mothers` age distribution	number of births per 1,000 women presented by age band: under 15, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50 and over. The age of the mother is defined as the age reached in the year the event took place.
16	Causes of death	the most frequent causes of death (COD) including each of the ICD chapters in the tables below as a whole. Presented for age groups 0-64 and 65+ separately.
17	Prevalence of any chronic illness	12-month prevalence of chronic illnesses in the following categories: • Cardiovascular diseases (l10-l15, l20-l25, l60-l69) • Mental disorders (F00-F99) • Endocrine disorders (E00-E39, E35-E65-E68, E70-E90) • Malignancies (C00-C97) • Chronic Pulmonary Diseases (J40-J47) • Gastrointestinal disorders (K20-K31) • Chronic liver diseases and cirrhosis (K70-K76) • Neurological disorders (G20-G41, G70-G71, G81-G82) • Musculo-skeletal disorders (M15-M19, M30-M32, M40-M45, M47, M60, M65, M80-M81) • Other conditions, including allergic conditions (L20-L54, J45-J46)
18	HIV / AIDS incidence	annual incidence of diagnosis of new cases of HIV per 100,000 persons

Urban health indicator no.	Urban health indicator name	Urban health indicator definition
19	Lung cancer incidence	number of new cases per 100,000 persons
20	Breast cancer incidence	number of new cases per 100,000 persons
21	Diabetes prevalence	prevalence of all types of diabetes mellitus
22	Asthma prevalence	point prevalence rate of diagnosed cases of asthma per 100,000 population
23	Chronic obstructive pulmonary disease (COPD) prevalence	point prevalence rate of the number of known cases of COPD per 100,000 population
24	Perceived general health	% of responses to the WHO question: "How is your health in general? Very good / Good / Fair / Bad / Very bad
25	Health related limitations of usual activities	% up to 3 response categories from EU-SILC question: "For at least the last six months to what extent have you been limited because of a health problem in activities people usually do? Would you say that you have been: Severely limited / Limited / Limited but not severely / Not limited?
26	Road traffic injuries	number of people injured in road traffic accidents within the EURO-URHIS urban area, who have presented to a hospital or a health centre, per 100,000 persons; data would be provided for age groups: 0-6, 7-14, 15+.
27	Injuries in the workplace	number of accidents or deaths at work per 100,000 workers
28	Regular cigarette smokers	% daily cigarette tobacco use by age groups 0-15 and 16+.
29	Alcohol consumption	% adolescents and adults consuming more than 3 alcoholic drinks per day (men) or more than 2 alcoholic units (each containing 10ml of alcohol) per day (women); data should be collected for the age groups 0-15 and 16+. N/B a "drink" is here defined as a recognised standard measure of spirits, or beer, or wine.
30	Use of cannabis	% of people in the age group 11-16 reporting use of cannabis at any time
31	Breastfeeding	% of babies breastfed (i) during the first 48 hours and (ii) by 6 months of age, expressed as a proportion of all newborn babies
32	Fruit and vegetables consumption	% population eating less than 5 portions of fruit and vegetables per day
33	Height and weight	collection of height and weight data for Body Mass Index (BMI) calculation. The BMI is a single number that evaluates an individual's weight status in relation to height (weight / height2) with weight (without clothes and shoes) in kilograms, and height (without shoes) in meters
34	Public access to green space	surface area of green spaces such as parks (calculated in hectares) that is open to the public, per inhabitant
35	PM 10 exposure	number of days during a calendar year in which any part of the urban population is exposed to concentrations exceeding limit value (50 ug/m3, 24 h average)
36	Noise nuisance	% population with annual average exposure to noise annoyance levels (Lden)* above limit value in the urban area,
		% population with annual average exposure to noise-related sleep disturbance levels (Lnight)* above limit value in the urban area
37	Vaccination of young people	% of children who complete courses of immunisation against diphtheria, pertussis, poliomyelitis, tetanus, haemophilus influenzae B, hepatitis B, measles, mumps, rubella, meningococcus C
38	Breast cancer screening	% of women in the following age groups receiving systematic mammography screening over the last three years: 45-49, 50-54, 55-59, 60-64, 65-69
39	Cervical cancer screening for women	% of women in the following age groups receiving cervical cancer screening within the last three years: 15-24, 25-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69

APPENDIX IV: EURO-URHIS Conference Notes

Committee of the Regions, 99-101, Rue Belliard, Brussels, Belgium.

Executive Summary

The objectives of the final conference were to present a system of urban health indicators (UHIs) to policy makers and users of data:

- To increase the awareness of the need of urban health indicators;
- To obtain feedback, suggestion and revisions of the EURO-URHIS indicators;
- To develop a plan for implementation of an urban health indicator system;
- To advocate inclusion of urban health in all policies.

The first objective was achieved by widely publicising the conference and feedback from the delegates. Many multimedia methods were used including adverts on the EURO-URHIS website, newsletters, mail shots, telephone and personal correspondence to individuals across Europe who have an interest in health indicators, urban health and health policy.

To help gain feedback, suggestions and revisions to the EURO-URHIS indicators set and to discuss how to implement the indicators, the conference was split into two days. Day 1 was to set the scene for the need for urban health indicators (UHIs), describe the total project methodology, results and discuss possible conclusions. Day 2 was to discuss urban health and how to implement a system for urban health indicators. Advocacy of inclusion of urban health in all policies was inherent in the programme for both days.

Feedback from the conference showed that all delegates felt the conference had increased awareness of urban health indicators, 89% felt the findings of the EURO-URHIS project would be helpful to policy makers and 86% felt that there was now enough evidence to support inclusion of urban health in all policies. The EURO-URHIS indicators were deemed by all delegates to be useful and not requiring revision. Many different strategies for the implementation of UHIs were discussed through future projects including EURO-URHIS 2, continuing the EURO-URHIS network and formation of a sub-national working group.

Day 1

Antoni Montserrat began by setting the scene for the need for UHIs. He emphasised that there are already health indicators at national and regional level with good sources of information. However, difficulties lay in harmonising the data extraction tools, interpretation and comparability especially at sub-national level. Therefore the EURO-URHIS project is particularly important to get a comprehensive system of UHIs. There needs to be "concordance" with other health programmes in a "coherent system" of health indicators which will form a "dimension of health indicators" from national down to urban level across Europe.

Dick Heller introduced all the work package leaders who presented a summary of each work package and their findings summarised in the notes.

Antoni Montserrat closed the day by summarising the EURO-URHIS project. He commended the project on reaching its objectives, having good representation across Europe and using of the ECHI shortlist as a base for further work on UHIs. He described that the lack of a pure definition of "urban" was not a barrier to action but the pragmatic definitions used was acceptable. He congratulated the project team on an excellent review of the literature, response rate from all city partners and assessment of quality. The analysis of the availability and problems encountered during the data collection was very helpful. In addition, the description of all the results in three separate databases will also prove to be beneficial. The city reports, ranking of respondents, population impact measures (PIMs) and "wish list" are excellent tools for policy makers. The project highlighted the need for adequate resources as it clearly demonstrated the

complex task of data collection. Many member states may not have the available resources in which to fund adequate data collection at urban level and their subsequent analysis, interpretation and implementation.

Further work could be to investigate further how EURO-URHIS can help plan for future needs on urban health policy and identify gaps for guidelines. He also felt that the development of PIMs may be implemented across Europe to help in urban policy making.

Day 2

The day began with a panel discussion highlighting the policy implications of health indicators chaired by Councillor Flo Clucas.

MEP Jean Marie Beaupuy described why European urban policy makers need health indicators especially in the context of housing. He described the importance of working collaboratively with an integrated approach and having joint policies linking all aspects of urban issues. The indicators applied to urban areas will be useful as in the autumn of 2008 the EU will make the urban plan. Funds will be made available for specific projects for cities that have an integrated approach. So, having a UHI system will help some cities identify what they need. In an era where global climate change is an important threat to human health, pollution-related UHIs are especially important in cities. He emphasised the need for accessing real time data. Many problems are concentrated in cities e.g. increasing migration, an ageing population etc. New problems in the future will need an integrated approach. The definition of a city needs to include more than the centre but surrounding villages and environment also as people commute further distances now. We need the data from indicators which meet our citizen's needs.

Jean-Loup Drubigny, Head of the UBRACT Secretariat, re-emphasised that health can not be considered alone and there needs to be practical action. The Leipzig agreement states social, environmental, economic and health needs are to be integrated. The URBACT programme is investigating integrated policy for all areas. Progressive cities have integrated policies. The URBACT website has all details of the programme. The URHIS 2 project can be thought of as an experimental lab and work together with URBACT. 75-80% of European citizens live in urban areas and everyone is in an urban environment. At what level are policies decided, implemented and managed? Many member states pass responsibilities to local level politicians, and health is an important issue for any inhabitants. Municipalities within cities have different needs due to different levels of wealth. The level of which decisions are made is difficult due to the changes in cities. So there needs to be in place solidarity of policies. Growth can worsen health inequality, it does not create equality, and therefore there is a fight against natural trends. Metropolises have massive wealth with pockets of poverty where health and life expectancy are far below average. We need to ensure that this does not hold up development and growth.

The panel discussion concentrated on

- Primary prevention of cardiovascular diseases, childhood obesity, health and promoting health environments. There is a role of national, regional and local governance.
- Data for policy making there are lots of data on disease risk factors and no further need more data for policy and politicians are swamped with data. The concurrent 2008 UA conference highlighted that quality data that is up to date is essential.
- Policy at local and national level is required elected politicians reflect needs of people that have elected them but this may be reactive rather than proactive.
- The need for data is high but we can't have data on everything, may have estimates based on census data. Local level demographic data is not ready and emphasises the limits of data.

There is strong evidence for the need for good quality health indicators at urban level using an integrated approach. Real-time data is ideal showing trends that would support health policy for the prevention of diseases. Data may exist, but it is not linked or accessible. Eurostat will be linking some databases later this year.

The EURO-URHIS project has identified 45 indicators which are important and can provide a service for managers and politicians. Many indicators are not available at urban level even if available at national level. The whole urban community are interested in common datasets due to commuting and emphasise the need for urban and regional health indicators. The EURO-URHIS 2 project will collect data at urban level.

There were three workshops that delegates could attend:-

Workshop A: How to collect data on urban health indicators.

Two main problems were highlighted, the sources of data and definition of an urban area. National data is aggregated and administrative data is from municipalities. There are major problems with resources and methodology and it is essential to know the limits of estimates. Further work needs to be carried out before data collection occurs.

Workshop B: How to present data on urban health for evidence based policy making.

The workshop demonstrated the use of aggregate measures and two scenarios were produced by WP9 for discussion by 3 groups with different levels of experience. They concluded that using disease estimates is difficult in policy making. PIMs can be used to describe the situation and impact of intervention. There are many problems/barriers to influence policy makers including technical and in the interpretation of aggregate measures. Are policy makers interested in measures may not be used when they often have short terms of office. Understand monitoring information is useful to start discussion not enough to set policy priorities and choose interventions. UHIs can be used to start a dialogue with policy makers before and use an integrated approach to help with interpretation and conclusions.

Workshop C: How to use a system for urban health indicators to influence policy.

The definition of an urban area resulted in many definitions and no common denominator but this can be regarded as a strengths of the EURO-URHIS project. It can contribute to national health policy which is important considering an increasing urban population. They can be used to demonstrate inequalities and contribute to new approaches and development of national health system. UHI data collection may enable identification of urban specific risk factors and how to impact on policy making. By collecting the data on prevalence of health hazards, politicians can prioritise. Bottom up and top down approaches can be employed. There is a strong need for advocacy of NGOs to influence policy at different levels and empower local people to take control of their own health. Stakeholder awareness needs to be addressed and raised together with advocacy and determining who is going to what and how. An urban health indicators system can help within health impact assessments to measure intra and intercountry differences. UHIs can help define a budget that countries could spend on health. Therefore by defining an urban area, developing a system for urban health can help with influencing policy.

The afternoon session was devoted to discussion of the future of urban health and urban health indicators. The project authors of the EURO-URHIS 2 project described the need for further research into UHI but also to broaden the scope to "urban health".

The EURO-URHIS 2 will start in January 2009 for 4 years and will collect existing data from indicators from the URHIS-45 list and health priorities/policies and survey data. Tools will be available to calculate/use/interpret aggregate measures and to provide an evidence base to influence urban health policy for health gain. Data will be analysed to help with benchmarking and sharing good practice. There will be many open training events and a conference that will allow dissemination of our products. The EUPHIX web-platform will be used to display results. Other initiatives include the EURO-URHIS network, setting up a EUPHA section on Urban Health, working party on health indicators, forming links with the International Society of Urban Health and other interested parties. The audience agreed on the initiatives.

A further panel discussion chaired by Clive Needle described policy based on evidence and inclusion of health in all policies.

Nick Fahey, Head of Health Information Unit at DG SANCO, highlighted the importance of well constructed health indicators at not just at national or regional level but local level for those who are responsible for health services/healthcare. Greater engagement with other agencies is needed to improve health. Cities across Europe are not all the same. More than data availability of UHIs is needed now. Many are methodologically difficult but highly relevant to policy makers. It is a strategic priority for sub-national indicators subgroup to be formed to support evidence based policy. Indicators at urban level are crucial due to significant variations between cities. There is a gap between getting data and influencing policy and the cost of an intervention versus not doing anything. The health strategy supports improving health and health information needs to be comparable for benchmarking and best practice but member states must have responsibility. Common European policy and strategy is to focus for health information to provide answers for the strategy. DG SANCO will provide and inform other policies through informing politicians and support other DGs. There are lots of actors and agencies. Liaison with OECD and WHO standard operating processes are mutually well informed and give a shared picture. The objective of well being stated in the Lisbon Treaty is explicit but what provides well being, perhaps economic security and social well being? EURO-URHIS 2 will be an exciting project.

Christopher Birt continued to describe how the EURO-URHIS 1 and 2 projects will contribute to better health in urban areas. The long term objectives are to ascertain what is being done well and identify areas for action and empower local actions by increasing local knowledge and understanding. There needs to be more discussion on urban health determinants in cities, advocacy encouraged to make comparisons and have health promoting cities. We need to be bolder, work together and intensify this process. We need to know what we want to do and consider global public urban health. The efficacy of interventions at urban level is important for policy makers. We need a task force combining the EU health strategy with global implications.

APPENDIX-V: All Partners Meeting 17th April 2007: WP9 Workshop: Population Impact Measures using Asthma and Substance Misuse

1. Introduction

Work Package 9 involves calculating Population Impact Measures (PIMs) to describe the population impact of risks and benefits. These provide local context to previous measures, allowing policy-makers to identify and prioritise the potential benefits of interventions on their own population. They contain the elements to which policy-makers would have to pay attention in the commissioning or improvement of services. They have special relevance for local policy-making and depend on the ability to obtain and use local data. Being explicit about the data required may have the added benefit of encouraging the collection of such data.

We have chosen two topical exemplars, asthma and substance misuse, to highlight how PIMs can be used in the context of urban health indicators.

2. Population Impact Measures

2a Data required for the calculation of Population Impact Measures

- Size and nature of the population or sub-population to which the programme is applied.
- Outcome you want to examine, as defined in your question. This might be deaths, hospital admissions, Quality of Life, cost-effectiveness etc.
- Baseline risk of this outcome in your population. In the absence of local data, you
 may have to use information from the literature or from similar populations.
- For a risk factor: the prevalence of the risk factor of interest in your population. This should use local data if possible, or you may have to make an estimate based on the literature.
- For an intervention, the difference in the current rate of application of the intervention and the intended use, or if a new intervention, what level of use of the intervention is anticipated.
- The degree of risk from the presence of the factor of interest, or the benefit resulting from the intervention you are introducing, on the outcome you have chosen to measure. This will usually come from a literature search. This should be in terms of a Relative Risk (or Relative Risk Reduction) of the outcome you have chosen, given the risk factor (or the intervention).

The PIMs which make use of these data are as follows:

Population Impact Number of Eliminating a Risk factor (PIN-ER-t):

"the potential number of events prevented in your population over the next t years by eliminating a risk factor".

The Number of Events Prevented in a Population (NEPP):

"the number of events prevented by the intervention in your population over a defined time period".

2b Examples for the use of Population Impact Measures

Asthma

This has been indicated in the URHIS 50 as an urban health indicator. Prevalence of asthma has been associated with smoking. We will explore the reduction in the prevalence of asthma achieved from reducing the prevalence of smoking from its current level, i.e. 27% for men and from 24 % for women, to 20% for both sexes.

Table-1: Data collected for PIN-ER-t for asthma where t=1 year in age group 21-64 years

	Manchester	Greater London	England
Population size- 21-64 age group (11)	222 862	4 406 385	28 406 010
Reduction of prevalence of smoking (12)	0.07 - 0.04	0.07 - 0.04	0.07 – 0.04
*Relative risk (13)	1.03 - 1.32	1.03 - 1.32	1.03 - 1.32
Annual incidence of asthma (14)	0.16	0.16	0.16

^{*}RR estimation from OR (15)

Table-2: PIN-ER-t for Asthma. The reduction in prevalence of asthma by reducing the prevalence of smoking to 20% in 1 year in age group 21-64 years

	Manchester	Greater London	England
*PIN-ER-1 year	61	1 198	7 723

^{*}Causality is assumed between smoking and asthma

2c Substance Misuse

Methadone is widely used for detoxification of heroin addicts. A number of studies have shown that methadone maintenance can reduce the heroin use and its negative outcomes. We will explore the number of deaths prevented in our populations with methadone maintenance treatment.

Table-3: Data collected for NEPP for mortality where t=1 year in age group 15-64 years

	Manchester	Greater London	England
Population size-15-64 age group (11)	263 121	4 915 124	32 053 017
Prevalence of opiate use (16)	0.00984	0.01064	0.00853
Baseline risk of death in the next year (17)	0.27	0.27	0.27
Relative risk reduction following use of methadone (18)	0.75	0.75	0.75
Proportion adhering to treatment (19)	0.62	0.62	0.62
Difference between current levels (62%) of uptake and ideal (90% - arbitrary)	0.28	0.28	0.28

Table-4: Number of deaths prevented in our populations in 1 year by increasing the use of methadone treatment from 62% to 90% in age group 15-64 years

	Manchester	Greater London	England
NEPP	91	1 838	9 612

3 Questions for discussion

- Can you think of examples from your own work applicable to urban health where PIMs might play a role, perhaps looking at URHIS 50?
- Can you suggest modifications that would improve them and the way they can be understood by policy-makers i.e. how would you use them in a report/paper?
- In what way do you think that the PIMs could be used in local prioritisation and implementation in your country?

APPENDIX-VI: Report for Steering Group Meeting, September 28th-October 1st, 2007

POPULATION IMPACT MEASURES (PIMs)

EU Countries and Urban Areas

Population Impact Measures (PIN-ER-t and NEPP) have been produced previously for Manchester City, Greater London and England, using asthma and heroin use as exemplars. It has been decided at the all partners meeting, which was held in Athens in April, that same calculations would be made for a number of selected partner countries and their selected urban areas. The Partners from Germany, Netherlands, Norway, Romania and Slovenia agreed to inform us the national- and urban area (UA)- level data availability to populate those measures and to provide the available data.

The data availability / provision by age group for the countries responded to the request is presented on table-1.

Table-1: Availability of requested data in selected partner countries

Data requested	Germany-Essen/ Ruhr city	Netherlands- Utrecht	Norway-Oslo (age-group)	Slovenia- Maribor
	(age-group)	(age-group)		(age-group)
Smoking prevalence	2,3	>	>	>
	(25-64)	(20-64)	(16-74)	(25-64)
Asthma incidence	*1	1 >	X	1 >
	(45-65)	(20-64)		(21-63)
Population size	1 >	>	>	>>
	(25-64)	(20-64)	(15-74)	(21-63)
Heroin use prevalence	1 >	X	1 >	X
	(18-49)			
Overall heroin-user mortality	1 >	X	2 >	X
	(all ages)			
Methadone treatment rate	1,2,3 >	X	Χ	X
Population size	>	>	>	>

1 not available at UA-level, 2 not available at national-level, 3 available at state-level

Overall, data for smoking prevalence and asthma incidence –although latter figure not very reliable- were more likely to be available compared to heroin use and methadone treatment data. Asthma incidence was not available at UA-level in Netherlands and Germany, (therefore similar rates to those national have been assumed for calculations) and not available at all in Norway and Slovenia; national- and UA-level asthma prevalence rate and asthma prescription data for Norway and an estimated overall national incidence rate for Slovenia were provided. Based on the data provided from partner countries, calculation of PIN-ER-t has been possible for Germany, Netherlands and Slovenia, except that for Germany only state-level figure could be produced.

Table-2: Number of new asthma episodes prevented over 1 year, if smoking prevalence were reduced to 20%

	Germany	Netherlands	Norway	Slovenia	England
Smoking prevalence	-	0.36 (M)	0.24 (M)	0.28 (M)	0.25 (M)
by sex		0.30 (F)	0.24 (F)	0.20 (F)	0.22 (F)
Asthma incidence	-	0.04 (M)	-	0.01	0.006 (M)
by sex		0.07 (F)			0.009 (F)
	-	1 202 (M)	-	9 (M)	152 (M)
*PIN-ER-1 year		25 350 (F)		2 (F)	2 026 (F)
(national)		Total = 26 552		Total = 11	Total = 2 178
		(265.4 per 105)		(1.9 per 105)	(7.7 per 105)
	North Rhine-	Utrecht	Oslo	Maribor	Manchester
	Westphalia State (NRW)				City
Smoking prevalence	0.31 (M)	0.38 (M)	0.23 (M)	0.31 (M)	0.26 (M)
by sex	0.23 (F)	0.30 (F)	0.21 (F)	0.21 (F)	0.23 (F)
Asthma incidence	0.0006	0.04 (M)	-	0.01	0.006 (M)
by sex		0.07 (F)			0.010 (F)
*PIN-ER-1 year	13 (M)	24 (M)	-	1 (M)	1 (M)
(UA)	76 (F)	468 (F)		3 (F)	27(F)
	Total =89	Total = 492		Total = 4	Total = 28
	(0.82 per 105)	(273.5 per 105)		(7.9 per 105)	(12.6 per 105)

^{*}Causality is assumed between smoking and asthma

Higher asthma incidence rate and especially very high smoking prevalence rates for Netherlands compared to those for Slovenia resulted in disproportionately high PIN-ER-t figures for Netherlands. Although not smoking prevalence but asthma incidence was very low hence, NRW (Germany) -with a population similar size to that of Netherlands- had a smaller figure than would be expected.

The PIN-ER-t figure for females in Slovenia was found to be smaller than that in Maribor. This paradoxical result could be explained by the fact that some areas in Slovenia possibly had lower smoking prevalences than the arbitrarily set new prevalence of 20%, which resulted in a negative PIN-ER-t figure; this information demonstrates the importance of collecting and analyzing data at local level to produce reliable measures.

Heroin use prevalence and hence methadone treatment rates were not available at all for Netherlands and Slovenia. The prevalence for Norway was only provided at national-level. Therefore, NEPP could be calculated only for the Germany state, though some assumptions likely to reduce the reliability of the figure had to be made: UK baseline mortality and treatment adherence rates have been assumed to apply; the result is presented on table-3.

Table-3: Heroin mortality prevented in the next year, if methadone treatment uptake is increased to 90%

	Germany	Netherlands	Norway	Slovenia	England
Prevalence of heroin use			0.002		0.00853
	-	-		-	
Current methadone treatment rate	-	-	-	-	0.37
NEPP (national)	-	-	-	-	18 193 (56.8 per 105)
	North Rhine-	Utrecht	Oslo	Maribor	Manchester
	Westphalia State (NRW)				City
Prevalence of	0.04 (18-20)				0.00984
heroin use	0.03 (21-24)	-	-	-	
(by age-group)	0.05 (25-29)				
	0.00 (30-39)				
	0.01 (40-49)				
Current methadone treatment rate	0.20	-	-	-	0.83
NEPP	13 329	-	-	-	31
(UA)	(154.5 per 105)				(11.8 per 105)

The heroin use prevalence for NRW (Germany) is higher than that of the UK and Manchester City, which consequently resulted in a disproportionately larger NEPP figure for NRW. The difference between the current treatment rates in Manchester City and England caused the difference between corresponding NEPP figures per 100 000 population.

Throughout the calculations in this report, wherever the data were provided for the age group other than the requested, it has been assumed that the same rates would also apply to this age group.

Conclusion

The data required to produce the PIM figures were partly available at national- and/or UA-level, although not always for the desired age groups and by sex. However, it should be noted that reliable data on heroin use –and thus heroin-user mortality-, except for those who are under treatment, are not likely to be collected in many countries mainly as a result of the stigma attached to drug misuse. Asthma prevalence but not incidence rate was more likely to be obtainable and interestingly smoking prevalence rates could be provided by all four countries at UA-level; it might have been more likely to populate the PIM formulas for all four countries, if a condition such as CHD rather than heroin use or asthma was selected.

APPENDIX-VII: Revised table-2 (Report for Steering Group Meeting, September 28th-October 1st, 2007)

Table-2 (revised): Number of new asthma episodes prevented over 1 year, if smoking prevalence were reduced to 20% in females and 23% in males++

Smoking prevalence by sex 0.36 (M) 0.24 (M) 0.28 (M) 0.25 (M) +Asthma incidence by sex 0.0015 (M) 0.0015 (M) 0.0015 (M) 0.0015 (M) 0.0029 (F) *PIN-ER-1
by sex
incidence by sex 0.0029 (F) 0.0029 (F) 0.0029 (F) 0.009 (F) *PIN-ER-1 - 45 (M) 1 (M) 1 (M) 152 (M)
by sex 0.0029 (F) 0.0029 (F) 0.0029 (F) 0.009 (F) 0.009 (F) *PIN-ER-1 - 45 (M) 1 (M) 1 (M) 152 (M)
Wear
year 1.050 (F) 1.51 (F) 2.006 (F)
1 050 (F) 151 (F) 1 (F) 2 026 (F)
(national) Total = 1 095 Total = 152 Total = 2 Total = 2 178
(10.9 per 105) (4.49 per 105) (3.5 per 105) (7.7 per 105)
North Rhine- Utrecht Oslo Maribor Manchester Westphalia
State (NRW) City
Smoking 0.31 (M) 0.38 (M) 0.23 (M) 0.31 (M) 0.26 (M)
prevalence by sex 0.23 (F) 0.30 (F) 0.21 (F) 0.21 (F) 0.23 (F)
+Asthma 0.0015 (M) 0.0015 (M) 0.0015 (M) 0.0015 (M)
incidence 0.0029 (F) 0.0029 (F) 0.0029 (F) 0.0029 (F) 0.0029 (F)
*PIN-ER-1 year 24 (M) 1 (M) 0 (M) 0 (M) 1 (M)
(UA) 368 (F) 19 (F) 5 (F) 1 (F) 27(F)
Total = 392
(3.6 per 105) (11.3 per 105) (1.2 per 105) (1.8 per 105) (12.6 per 105)

^{*}Causality is assumed between smoking and asthma

⁺ Asthma incidence rates are estimates based on the RHINE study (10)

⁺⁺ The lowest prevalence rates in England

APPENDIX VIII Evaluation reports

WP1

WP1 final report covers the content and appearance evaluation criteria. It is concise, clear and comprehensive, covering all requirements described in Project's Technical Annex.

A suggestion that can be made from the evaluation point of view, is the WP1 report to refer to the problems or issues that were faced by the coordinators of WP1 during the implementation of Project's work. Those issues may be related to all aspects of partners' participation (organizational, financial, technical, time schedule-related or even personal) that may have affected the smooth flow of the work. Ways that WP1 leaders, in cooperation with partners have handled those issues, should also be described. This will give an answer to the risk analysis and contingency plans that is clearly included in TA. If no problems encountered, again, it is better to mention this fact, too.

A technical remark should also be made in relation to the text under the heading of Financial Management. In the description in WP3, it refers to visits of the evaluation team to WP leaders and that the incurred extra expenses were covered from the budget of WP1. However, as you know this not the case, and it is rather confusing for the officials in the Commission. Especially since on the contrary, the travel budget for WP3 was not used.

For the rest of the report under Financial Management that refers to other WPs, I cannot express a valid opinion as I am not aware about them.

WP2

The following remarks concerning the final report of WP2 should be made:

The mailing list of those contacted in the frame of Project's dissemination should be attached to the deliverable.

All Euro-Urhis newsletters should also be submitted with the deliverable.

Concerning Euro-Urhis Conference, it might be better to include a detailed list of participants and the organizations that they represented, a report on speakers contributions (namely, their speeches) and especially, all the conclusive remarks that were the final outcome of the Conference. In this way, the contribution of Project's Conference to disseminate its results can be better assessed and appreciated by the Commission's officers.

It seems that there are not even basic statistics concerning the usage of the website (e.g. number of visitors). Usually, to evaluate a website from the perspectives of its effectiveness to disseminate the intended information, this type of statistics are quite indicative and thus, all technical details concerning the "appearance" of the website become less important. So, if there are some indicative statistics concerning Project's website's usage it would be most useful.

The last sentence of WP2 report "WP2 is now working hard to meet the remaining deadlines in order to finalise the EURO-URHIS project to the satisfaction of the evaluators", should be omitted, as it shows that the internal evaluation of the workpackage has been done before the report is finished!

WP4

The goal of literature review and appraisal is sufficiently covered by the authors of this WP.

In a preliminary, first draft of this WP, a number of comments were made, in regard to its content. Those comments and recommendations are given in the followings.

Aim Work Package 4

A note should better be made that all this effort has to have at first a very robust scientific evicence based on large epidemiologic studies and secondly, those indicators that we identify as important for health and we further request to allocate money to be monitored, should be possible to be effectively changed through policy action. A similar case holds true for massive screening of populations to identify health (like mamographies for breast cancer or pap tests for cancer of uterus). Nevertheless, in all screening cases, medical intervention is feasible and cost effective. In this context, and having in mind that Urhis Project addresses policy makers aspects of feasible and cost effective policy interventions should be considered not only crucial but even more as prerequisites.

For the purpose of this Project, all collaborative actions that have been made should certainly be described but we should also provide with a summary of their impact on a short and a mid-horizon perspective. This information provides a precious advice regarding which effort were effective and are to be followed up and which were not proved effective and should be abandoned or modified accordingly. Otherwise, it looks like that we do not gain any benefit from previous efforts and experience. So, the proposed inventory should be followed by a concise summary of the international collaborative actions to date.

What is urban health (research)?

It might be advisable for the policy makers to get information at this point about all the main thematic areas that urban health focuses on.

To be relevant to our Project objectives it should be explained how the above mentioned methodological difficulties of research in urban areas correlate to a lesser level of urban health.

Findings literature study

A note should be made on efforts to identify sources of information or grey literature at those countries.

It might be important to present a concise overview of the results that are available on each of those thematic areas.

All those comments were taken into account along with other improvements that were made by the authors of this document. The outcome of this effort offers now a complete report without gaps or ambiguities. The level of detail provides concise and verifiable information.

Appearance

The report is readable and the terminology is clear.

The concepts that are used are also clear and comprehensive and the structure of the document is fine.

WP5

CONTENT

The scope of the report although is broad is not quite clear, as it is commented in the following. There are no major gaps or ambiguities but the information given should be in some cases more detailed to provide clear information. In terms of the verifiability of the contents some remarks have been made to be more defensible and substantiated. In the following the remarks and recommendations related to the content of the document under evaluation are given. A short description of the rationale of each comment is given first, followed by a recommendation for corrective action.

Remark (1)

The first paragraph of "Context" states important issues but the level of detail is rather not adequate for the reader be filled in the picture.

Recommendation: Additional information should be given on the domains that are simply mentioned like "demand on information", "particular spectrum of health problems" and "unique system of health care".

Remark (2)

The section "Methods" seems to be rather weak in terms of the description of the methodology that was followed. It should not be considered as a "method" the fact that experts from Euro-URHIS Project expressed their opinion. It would be expected that in this section methods to collect, categorize and maybe synthesize the international experience would be given.

Recommendation: At least, some type of sorting out the various categories of definitions of urban areas and populations could have been provided, as the relevant work is provided in WP4.

Remark (3)

The section of "Results" starts with the statement that "there is no clear definition of what is urban that can be applied to every country".

Recommendation: It might be more useful the report to provide the most common or –according to the authors of the WP- the most useful and workable definition, or the most relevant to Euro-URHIS Project scope, out of the many definitions that are available in the international literature.

Remark (4)

The "Theoretical approach" is fine although –as it was mentioned above- a kind of grouping of definitions would make the report more comprehensive. All this information is provided in the results of WP4.

Recommendation: Please see previous recommendation

Remark (5)

The scope of the report is to provide definitions for urban areas and populations. After the theoretical approach though, the report continues with the practical approach of Euro-URHIS Project experts' opinion and it ends up in the "Summary of Results" with the statement that "... there is no clear and uniform definition of urban areas"! Then it suggests that "a meaningful selection of cities or agglomerations has to be done by the URHIS members themselves"! This seemingly shift of the scope of the report from defining –based of course on the work of other WPs, too- what is an urban area and population exclusively towards the selection of cities or agglomerations seems unexpected to the reader of a report with the title "definition of urban areas

and populations". As this is in accordance with Project's Technical Annex description and falls within the initial scope and purpose of the work of WP5, it should be spelled out in a clearer way that we focus on "... the most appropriate administrative level for the purpose of information exchange between urban areas".

Recommendation: The dual scope of the WP according to the Project's Technical Annex should be clearly spelled out.

Remark (6)

In the section of "Recommendations" at first it is stated that the selection process should be such so that at least one urban area to be included in the project. This way to define "urban areas" does not seem very scientific. If we have –due to our contractual obligation with EU- to include all EU MS in our Project, then we can spell out that our definition of "urban areas and populations" serves this goal.

Recommendation: Rewording of Project's aim regarding definition of urban areas and criteria used.

Remark (7)

The same rationale continues with the next recommendation in an effort to include 2-3 urban areas per country. If this is the case, it would be advisable to be included in the report the advantages of the proposed "practical approach" for future applications on European level.

Recommendation: Rewording and to better clarify Project's aim regarding criteria for inclusion of urban areas from EU MS.

APPEARANCE

The document is readable although corrections in the grammar in some cases should be made.

The terminology is fine and the concepts that are used are comprehensive.

The structure of the report is reasonable although some relevant remarks have been made in the above mentioned remarks.

WP6

CONTENT

The scope of the report is sufficiently covered without major gaps and with no ambiguities. The level of detail provides sufficient information. In terms of the verifiability of the contents some remarks have been made to be more defensible and substantiated. In the following the remarks and recommendations related to the content of the document under evaluation are given. A short description of the rationale of each comment is given first, followed by a recommendation for corrective action.

Remark (1)

Piloting the draft data collection instrument.

The choice of the four countries for piloting the questionnaire is not commented. The pilot countries include three well developed countries and Greece, which is not so well developed, in terms of collecting and organizing data related to public health issues. However, none of new EU MS are included in the piloting –especially the very new ones, namely, Bulgaria and Romania as well as Turkey. Those countries may have quite different issues to tackle, in respect to the domain of urban health.

Recommendation: At this stage of Project's lifecycle, it is better for the WP6 leaders to keep a closer eye for the specific peculiarities or potential problems that may exist in the new EU Member States and Turkey.

Remark (2)

Developing the list of indicators

There are two main lines of action that may follow collection of urban health indicators data. One is to find that a public health problem does exist, based on the available data and the other is that a major health issue is potentially a major threat for public health, based exactly on the non-existence of relevant data. Both directions can fully justify Euro URHIS Project goals. To this end, findings referring to "missing" health indicators' data can also be very useful for corrective actions from the side of public health authorities in EU Member States.

Recommendation: The above mentioned rationale related to the importance for urban health data that are missing and the fact that Euro URHIS Project work can identify, should more clearly be demonstrated, as an additional piece of critical information of Project's work.

Remark (3)

As it is well stated above inclusion of health indicators was based on previous work and information gathered in WP4 and WP5. In this frame, it is expected to include in the deliverable a concise review on whether each of the indicators represents an appropriate one for urban health, whether the total number of indicators could be reduced and what are the pros and cons, as well as to consider alternative suggestions for the inclusion of other health topics and indicators and the rationale behaind it. However, all the information which is relevant to the above stated aims is not included in this document.

Recommendation: At least an overview of the reasons to include or not the suggested urban health indicators should be included, taken from the results of the work of WP4.

Remark (4)

We should not give the impression that differences in the type of age stratification for various health data is an almost "catastrophic" obstacle. Certainly, it is more appropriate and convenient to have data ready for comparisons among sites. However, we cannot afford to discard any data due to different groupings, provided they are accurate and reliable. It should rather be taken for granted that it is more likely a long term goal to have all EU MS to agree on the same age stratification.

Recommendation: The issue of age stratification can better be simply mentioned as an important issue and the Urban areas can provide us with whatever they collect. This issue should be put in the frame of a proposal for future coordinated action.

Remark (5)

Developing the questions for each UHI

Recommendation: Please refer in previous comment and suggestion related to the rationale on which we base the proposed indicators of the questionnaire. It is of critical importance for the robustness of our methodology to demonstrate strong indications or even scientific proofs that are currently available in the international literature.

Remark (6)

Proposed administration of the questionnaire

It is expected that obstacles and problems will come up during the implementation of this phase in all EU MS. The plans to handle them as effectively as possible, is of vital importance for the successful implementation of Project's objectives.

Recommendation: Potential risks and obstacles – for groups of countries or, if possible, for each MS- that are anticipated and contingency plans to tackle those problems should be described.

APPEARANCE

The document is readable although corrections in the grammar in few points should be made (ie. in page 4, the second last paragraph does not start with the word "ten" but with the number 10).

The terminology is fine although the wording of the questionnaire is an important issue in itself and it has been effectively taken care by the authors of the document.

The concepts that are used are clear and comprehensive and the structure of the report is fine.

WP7

The work that was undertaken in the frame of WP7 was of critical importance for the success of the Project. It was also administratively very difficult as it included connection with a vast number of liaison persons in many countries. Despite all those difficulties it is considered that the planned tasks have been very successfully implemented.

It should be noted that a number of limitations in the selection of the liaison persons, and the questionnaires response rate, along with the representativeness of the answers received from the countries existed. The related issues are explained in a detailed way and are effectively handled in WP7 final report. In addition the Helsinki workshop successfully addressed the problems that appeared.

Finally, the analysis of the collected data and the conclusive remarks that are made, which were based on the experience gained, are considered that are right to the point, helping future work in the domain of Urban Health.

WP8

First response to the draft of WP8, concerning its evaluation

My main remarks in the first draft of WP8 are:

At first to ask the country liaisons to "read and review" their respective reports.

Add in the summary of WP8 some useful statistics from the pool of the collected data, as well as some key conclusive remarks.

I assume that the country liaisons have reviewed the data for their country, otherwise this should be done, too.

I think this is the least we can do at this point of time.

WP9

The report on WP9 has a well defined structure. A number of issues though appear in terms of the content which need attention and corrective action.

At the point 1.1, Objectives, of the report, it is not quite clear to the reader how the two stated objectives marked with bullets are linked with the introductory sentence. More specifically, it starts with the statement to develop an innovative approach in developing (twice to "develop"!) ...indicators...

After this rather puzzling objective, a clear cut objective follows:

to improve the presentation ... of information.

But then, in the second objective it is stated:

to enable and facilitate policy making and increase their impact on public health policy.

It seems not easily explainable how an indicator can increase its impact on public health policy. It obviously means that the politicians can be convinced by a well presented indicator and consequently, based on this, their policies will be improved.

After the above description, in the last sentence of the Objectives the first bullet objective and its impact on policy making is reiterated, without adding any new information.

Based on the above mentioned remarks, I would suggest the text of these objectives of this report to be rewritten in a clearer and concise way.

In regard to the point on PIM of the report, it goes without saying that PIMs are of pivotal importance and offer concrete assistance to policy makers as well as to the members of the society to better grasp health risks and/or potential benefits of certain interventions. Exactly because of this, it would be rather advisable for this report to describe in detail the concept of PIMs, to highlight the advantages that they offer through their application worldwide and to demonstrate their usefulness for health policy making. Such an extensive description along with the international experience can convincingly underline the importance of this work in the frame of Urhis Project.

To this end, I would suggest to include in the beginning of this section, the relevant background information, namely, all the above mentioned underlying theory and especially the international experience. It seems that this work is being prepared for a publication that is mentioned in this report, so it would be easy to be included here, too.

Further to this, detailed methodology on how PIMs are developed and work in practice should be included in this report, for the interested politicians or their consultants and advisors who would be interested to get to know in detail the scientific robustness of those indicators, before they start using them.

The text at the point 2.1 part of this report is well written and it provides useful information to the reader from different aspects.

At Conclusions, the first bullet refers to the easiness of calculations of PIMs. However, the application of the formulas in the example of the case was not included in the previous text and it would be better an example with numbers to be given. The third and fourth bullet conclusions address the same issue, that one of the reliability of the data and thus, their applicability for valid PIMs, so they could be included in one conclusion point.

Finally, the first recommendation at point 4 of the report, refers to the specific bureaucratic and political processes for policy making, a factor that despite its value, appears suddenly for the first time in this report. In other words, if this issue is really important, it surely deserves some more deliberation to demonstrate its links with PIMs.

In Appendix IV the description of the case is fine, comprehensive and illustrating the method in a sufficient way. It should be commented though that the remark that PIMs are pivotal for prioritization of policies does not take into account the fact that for prioritizing policies the PIMs of at least the most important risk factors or interventions need to be available! And at this stage, due to lack of reliable data at local level, such a condition is not the case. Thus, such a limitation should be mentioned. At the end of the Appendix IV, three "Questions for discussion" are given but without any follow up, regarding partners' responses to them. It may be better, either to exclude from the report those questions or to complement them with the responses from the partners and the conclusions that were achieved.

Appendices VI and VII are also well written, clear and to the point, again though without an example of how to calculate PIMs in the cases that are used.

Finally, a missing element from public health's point of view is for example, the fact that reducing smoking prevalence in a population group, has many more beneficial effects in health of the target population, apart from the prevalence of asthma. And this element is certainly of crucial importance, when we introduce the notion of prioritization for policy making. This notion is described at point 1.2 (PIMs) of this report. However, the claim that PIMs alone are evidence-based information to develop a new health policy measure and can be used for prioritization among various health policies, cannot be fully justified. Despite that, the abovementioned limitation does not reduce the importance of PIMs but it may underline its importance among the many interwoven risk factors in the domain of public health.

In conclusion, the content criteria for evaluation of WP9 seems to be in quite a few cases –as described above- not sufficient. It seems that the completeness of the report needs to be substantially improved, along with the level of details that the data are given. In this way, it expected that even the criterion of clarity and unambiguity will be improved.

WP10

- 1. One of the limitations of this study is related to the way the URHIS participants have been involved in Project's work, as well as the liaison persons who provided the data sources from each country. Although there were not many alternatives to more effectively handle this issue, we cannot claim that the selection of those key persons has followed specific criteria. In addition, regarding the availability of the data in each country, it is not known whether the liaison persons used an "exhaustive" way to eliminate the chance that local data do exist, as long as we claim that they do not exist and thus, be accurate in our report.
- 2. The WP10 supplementary report describes in a very comprehensive and meaningful way all aspects of the way data were collected. However, since the document is quite lengthy and contains very valuable information, it might be very useful for the busy reader (politician or policy maker) at the end of the document and before the conclusion to add a list in a two-column table or in a bullet-type form the: a) results and b) comments/suggestions for further action.

