



# Health Impact Assessment Toolkit for Cities

## Document 5.

### **Introducing health impact assessment in Bologna, Italy: a case study**



## ABSTRACT

This document explains the pilot project on health impact assessment (HIA) that took place in Bologna, Italy from March to September 2004 based on Promoting and Supporting Integrated Approaches for Health and Sustainable Development at the Local Level across Europe (PHASE Project). A literature search of the political and executive system at the national and local level in Italy was conducted followed by three HIA meetings in the City of Bologna. The first meeting raised awareness for a wide audience to gain political commitment for HIA. The second meeting provided in-depth training of HIA for the local officers in Bologna who were going to carry out the HIA. The third meeting evaluated the HIA process. Interviews were conducted with all participants (administrative officers and directors, healthy city coordinator and the researchers), who also filled in a questionnaire to assess the application and introduction of HIA. An HIA steering group was created with the aim of conducting a pilot appraisal to identify the health effects of a proposal called Last Minute Market to strengthen social cohesion in Bologna. The work was carried out in multisectoral and intersectoral collaboration between officers from different departments in the local government and researchers from the University of Bologna. The results of the evaluation showed barriers and enablers for introducing HIA in the City of Bologna. The introduction can be seen in two strands: a political strand and an executive and administrative strand. The most important factor for the HIA introduction was the political strand. During the first phase of implementation, there was clear commitment to and support for HIA. However, an election to the local government was to be held in June 2004. The officers had a commitment for HIA from the former government, but new approval and commitment had to be found within the new one. This applied not only to HIA but also to approval of renewed commitment for the Last Minute Market proposal by the new government. The process proved the importance of having clear political commitment and support to be able to implement the HIA process. The main barrier regarding the executive and administrative strand was that no officer had any knowledge about HIA. However, the training events in this project helped to build the capacity for HIA in the municipality. The final recommendations of the HIA led the local institutions to adopt the project as a promoter of social cohesion.

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## The WHO health impact assessment toolkit

The project Promoting and Supporting Integrated Approaches for Health and Sustainable Development at the Local Level across Europe (PHASE Project) was funded by the European Commission, Directorate-General for the Environment, under the Community Framework for Cooperation to Promote Sustainable Development (2003–2005). The WHO Healthy Cities and Urban Governance Programme has coordinated the Project together with health impact assessment experts across Europe and the coordinators of the Italian Healthy Cities Network and Association of Healthy Cities of Slovakia. The PHASE Project aimed to promote the integration of health and social aspects into the sustainable development by focusing on and introducing the process of health impact assessment (HIA). The objective was to develop an HIA toolkit to be used for introducing and implementing HIA at the local level. The toolkit consists of five documents:

1. Health impact assessment – from vision to action (background paper)
2. Health impact assessment – a training module
3. Health impact assessment – how can it support decision-making? (brochure)
4. Introducing health impact assessment in Trnava, Slovakia: a case study
5. **Introducing health impact assessment in Bologna, Italy: a case study**

This document explains the HIA pilot project that took place in Bologna, Italy. To fully explain the introduction of HIA in a city, the case study includes political, social and economic background on Italy and then describes and analyses the HIA process in Bologna.

## Acknowledgements

This document was written by Louise Nilunger, Project Manager, WHO Healthy Cities and Urban Governance, together with Lucia Garutti and Maria Manni, project officers, Michaela Fantini, Coordinator of the Italian Healthy Cities Network and Fulvia Signani, former Coordinator of the Bologna Healthy City Project and Italian Healthy Cities Network. Leah Janns Lafond, former Project Manager and Shouka Pelaseyd, Project Officer, WHO Healthy Cities and Urban Governance as well as Andrea Segrè of the University of Bologna contributed. The work has been supervised by Agis Tsouros, Regional Adviser, WHO Healthy Cities and Urban Governance. David Breuer considerably improved the language and style of the document.

## 1. Introduction

Within Europe, health impact assessment (HIA) has predominantly been practised in northern European countries such as Finland, the Netherlands, Sweden and the United Kingdom. The PHASE Project aims to introduce HIA in countries where it is not already being practised. To this end, a country in the southern part of the European Union (EU) and a new EU country have been targeted for participation in the PHASE Project. The Project is producing an HIA toolkit, based on existing experience, which will be piloted by the Italian Healthy Cities Network and the

Association of Healthy Cities of Slovakia. These are longstanding networks that have shown innovation and the ability to introduce new ideas to local policy-makers.

For example, the Association of Healthy Cities of Slovakia has worked closely with Slovakia's Ministry of Environment to produce a guidebook on how to produce local environment and health action plans, and it has carried out a number of projects on urban mobility. The Italian Healthy Cities Network, which brings together some of the largest cities in the country (including Rome and Milan), is characterized by strong political leadership. The Italian Healthy Cities Network is currently focusing on developing city health profiles and plans. The Network is supporting local professionals and decision-makers by producing a practical manual.

This document presents the introduction of the HIA process in Bologna, Italy. The policy context in Italy is described and political, social and economic background is provided to better understand the HIA process. The HIA process has been evaluated to identify enablers and barriers for HIA. A similar document has been prepared for the case study in Slovakia.

## 2. Italy

### 2.1 Political background

Italy is a constitutional republic. It has three branches of government: executive, legislative and judicial. The executive branch consists of the President as the chief of state and the Council of Ministers (cabinet) and is headed by the President of the Council (Prime Minister). The legislature consists of a bicameral parliament with a 630-member Chamber of Deputies and a 315-member Senate. The judicial branch is made up of an independent constitutional court and lower magistracy (*1*).

Italy has 20 regions, which are subdivided into 103 provinces. Each province has a prefect, who represents and is appointed by the national government. The basic unit of local government for every town, city and rural area of every size is a municipality (*comune*). A municipality can range in size from a small village to a large city. Italy has 8102 municipalities (2002), with an ancient tradition of independent self-government. Each municipality is governed by a council elected for a 5-year term.

Mayors of cities and towns with more than 15 000 residents are directly elected.

The constitutional framework distinguishes between ordinary regions and special regions. The five special regions are governed by special statute and enjoy constitutionally based self-government rights. The special regions include:

- Sardinia
- Sicily
- Trentino-Alto Adige (including two provinces with self-governing statutes, Trento and Bolzano)
- Valle d'Aosta
- Friuli-Venezia Giulia.

All regions have legislative powers in:

- health
- social welfare
- training and vocational education
- urban planning
- public housing
- economic development
- tourism and cultural activities
- agriculture, forestry and mining
- regional public transport
- subsidies to industry
- public works
- environment.

All regions have the power to allocate freely the funding received from the national government. Special regions enjoy wider autonomy and receive a share of government funding that is higher than average. The special statute regions have an even broader range of functions that are enshrined in specific legislation with constitutional guarantees. Their financing is also distinct, as they are allowed to draw from a share of the central government's revenue from income tax and value-added tax (2).

The regions own some health care centres (stipulated by law) that are allowed to borrow to finance investment. Since 1992, regional autonomy for health care has widened considerably thanks to reform legislation. In 1997 a reform known as Legge Bassanini extended the powers transferred to regions through the principle of subsidiarity. Responsibility for regulating, planning and organizing health care delivery has been transferred to the regions, and the central government retains responsibility for functions such as approving the National Health Plan, allocating funding and defining clinical and accreditation guidelines.

In 2000, a Single Law on Local Authorities was passed that decentralized some state functions to the regions, including responsibilities for economic, environmental and spatial planning. Several responsibilities were delegated to the municipal level as well (3).

## **2.2 Economic background**

Italy's economy is largely based on processing and manufacturing goods. The major industries in Italy include: precision machinery, industrial machinery and equipment, transport equipment, motor vehicles, chemicals, pharmaceuticals, electric and electronic equipment, fashion, clothing, leather, jewellery and shoes.

Italy has very few natural resources; these include natural gas reserves in the Po Valley and offshore on the Adriatic Sea. All raw materials for industry are imported. Italy imported 83% of its energy in 2001, and this proportion was about the same in the 1990s.

According to calculations by the Organisation for Economic Co-operation and Development (OECD), Italy has the fifth largest economy in the world. Italy is a member of the Group of Eight (G8), the EU, the OECD, the World Trade Organization, the Organization for Security and Cooperation in Europe and the North Atlantic Treaty Organization (1).

Italy is in the midst of a slow economic recovery but is gradually catching up to other EU countries (1).

Since 1992, Italy has reduced its social welfare programmes, especially pension and health care benefits. One of the weaknesses in the 1990s was labour market structure:

- 33% of all unemployed people were young people under 25;
- women accounted for only 36% of the workforce; and
- an underground economy of 14–20% of unemployed people and illegal immigrants (especially in difficult agricultural work in the rural south).

Unemployment is a regional issue; there is a significant gap between northern and southern Italy. For example, in 1999, the unemployment rate is 22% in southern Italy versus 7% for central and northern Italy. Of the total GDP, 75% is produced in the centre and north versus only 25% in the south (1).

## 2.3 Social background

Italy has the fifth highest population density in Europe, about 200 people per m<sup>2</sup>. In 2002, Italy had a population of 57.4 million (4). A total of 77% of the country is mountainous and 23% is forested. The richest part of Italy is the industrial north, which has the best farmland. The central part of Italy has great cultural centres with a flourishing tourist trade, and the southern part is the poorest and least developed part of the country (5).

Italy has very few ethnic minority groups. The largest groups are the German-speaking people of Bolzano province and the Slovenes around Trieste. Other groups comprise small communities of Albanians, Greeks, Ladinians and French. Although immigration has increased in recent years, the Italian population is declining due to low birth rates (1).

## 2.4 Health profile

Italy has one of the lowest fertility rates in the world and the percentage of the population 65 years or older is increasing steadily (5).

It has the highest infant mortality rate in the EU, although it underwent the second largest decline during the 1990s.

Cancer is the most frequent cause of death for people 64 years or younger, followed by cardiovascular diseases. Overall, cardiovascular diseases cause more deaths than cancer.

Given the existing economic imbalance between north and south, regional differences in demographic and health indicators are also marked.

An increase in obesity, especially among children, has been related to increasing caloric intake. Immigration has increased in recent years, with 70% of immigrants being 18–40 years.

The most widespread diseases among immigrants are infectious diseases, especially sexually transmitted infections. Immigrants usually access the health care system through specific immigrant health offices created inside local health units and through some voluntary centres delivering health services for immigrants only (5).

The effects of environmental conditions are detrimental to human health. One of the biggest problems resulting from the increase in urbanization and road and air transport in Italy is noise (6). In 1991, 42% of the urban population found the noise level at home to be unbearable and an additional 38% found it hardly bearable. This is the highest proportion among the EU countries.

Another issue of importance is safety at home and during leisure activities. In Italy, 0.45% of the population has at least one home or leisure accident each year, ten times more than are injured in road crashes. The risk varies considerably with the average amount of time spent at home: women are twice more likely to have an accident, and the rates are relatively higher for children and highest among elderly people. A comparative study carried out in the EU countries provides similar evidence by analysing all cases treated by a sample of health care services in each country between 1990 and 1992. According to this study, accidents at home accounted for the largest share of all accidents recorded in Italy, which is much more than the EU average across all age groups (7).

## **2.5 Health system**

### **2.5.1 National level**

At the national level, health care and the operation of the National Health Service (NHS) are governed primarily by Law No. 833/1978. The implementation of the national health programme is delegated to the regional and the local regional organizations.

The objectives of the national health programme are set out during the approval of the National Health Plan, which is intended to bridge the existing social and health gap, especially in the southern regions. All the objectives of the national health programme are determined with the help of the regions – within the framework of economic planning and in accordance with the relevant legislation, which stipulates, among other details, the levels of health care services that must be guaranteed for citizens (7).

The government draws up the National Health Plan based on proposals from the Minister of Public Health; the Plan is subject to the approval of parliament at the same time as the legislation on the multi-year funding programme for the National Health Service. The National Health Plan runs for three years. The regions have 150 days from the day of entry into force to adopt or amend the regional health plans in accordance with the national health plan.

The 2002–2004 National Health Plan differed from previous health plans in its response to the following:

- the process of transferring more power to the regions; and

- the ageing of the population combined with the increased performance of medicines, which is bringing on a new crisis.

The National Health Plan offers unitary management of health protection throughout the country through a network of local health enterprises. These local health enterprises operate independently and more in the manner of a business, covering the structures and offices of each municipality. In addition, they are responsible for providing health promotion, health care, physical therapy and forensic science services, guaranteeing health services to the entire population (7).

In 2001, the National Health Plan extended the scope of health promotion strategies by defining a few broad objectives:

- promoting healthy lifestyles;
- fighting the major causes of death (cardiovascular diseases, cancer, infectious diseases and accidents);
- improving the environment; and
- protecting vulnerable members of society (children, elderly, disabled, destitute, etc.) (8).

In addition, specific targets were identified, including reducing:

- the prevalence of obesity (25% among men and 30% among women);
- the proportion of smokers (from 34% to 20% among men and from 16% to 10% among women);
- alcohol abuse (by 30%);
- mortality rates for cardiovascular diseases (by 10%), cancer (by 10% in men and 5% in women), road crashes and occupational accidents (by 20%); and
- infections contracted in hospitals (8).

### **2.5.2 Regional level**

Regional governments, through their departments of health, are responsible for pursuing the national objectives laid out in the National Health Plan. In relation to health care (benefit packages), the regional health departments deliver these through a network of population-based health care organizations and public and private hospitals.

The regional level has legislative as well as executive functions and technical support and evaluation functions. Legislative functions are shared between the regional council and the regional government. Legislative Decree 229/1999 states that regional legislation should define:

- the principles for organizing health care providers and for providing health care services;
- the criteria for financing all health care organizations (public and private) providing services financed by the regional health departments; and
- the technical and management guidelines for providing services in the regional health departments, including assessing the need for building new hospitals, accreditation schemes and accounting systems.

This Decree has significantly increased the legislative power devolved to the regions and is being currently implemented at the national and regional levels.

The executive functions of the regional governments entail outlining a three-year regional health plan. This plan is based on National Health Plan indications and on the assessment of regional health care needs and is used to establish strategic objectives and initiatives, together with financial and organizational criteria for managing health care organizations. Other responsibilities of the regional health departments are allocating resources to various health units and hospitals and applying the national framework rules to public and private health care and other activities related to health care.

The regional health departments in some regions also provide technical support directly to the local health units and to public and private hospitals. Other regions have formed an agency for regional health care services, which is responsible for assessing the quality of the local health care and for providing technical and scientific support to the regional health departments and the local health units. Technical support is also provided during the planning process to assess population needs, to define the range of services to address those needs. Regions that have created an agency for regional health care services are:

- Emilia-Romagna (1994)
- Friuli-Venezia Giulia (1995)
- Campania (1996)
- Marche (1996)
- Piedmont (1998)
- Lazio (1999)
- Tuscany (2000).

### **2.5.3 Local level**

A series of reforms in the late 1980s shifted municipal powers to the regional level. From 1992, the structures operating at the local level in relation to public and private health care structures and providers were divided into four different categories (5): local health units, public hospital trusts, national institutes for scientific research and private accredited providers.

Local health units are geographically based organizations responsible for assessing needs and providing comprehensive care to a defined population. They are headed by a general manager appointed by the regional health departments for a period of five years. Services are structured under a divisional model in which each division has financial autonomy over and technical responsibility for three different areas of the health care system, including a division on health promotion. The health promotion division is responsible for health promotion, preventing infectious and other diseases, promoting community care and enhancing people's quality of life. These divisions also provide services for controlling environmental hazards, preventing infectious and other diseases, promoting community care, enhancing people's quality of life, preventing occupational injuries and controlling the production, distribution and consumption of food and beverages.

Legislative Decree 229/1999 and Law 662/1996 state that the local health unit services are financed under a global budget with a weighted capitation mechanism.

Public hospital trusts provide highly specialized tertiary hospital care. National institutes for scientific research are research-oriented hospitals operating at the local level. They are spread throughout Italy and are directly financed by the Ministry of Health.

Finally, private accredited providers provide ambulatory, hospital treatment and/or diagnosis services financed by the NHS.

The municipalities carry out the administrative health functions that are not assigned to either the state or the regions by law.

## **2.6 Local government trends and health-related responsibilities (3)**

In 1993, major municipal reforms resulted in the direct election of mayors and provincial presidents as chief executives and allocated their political supporters at least 60% of municipal council seats. This has led to the strengthening of the executive arm of local government. The fiscal autonomy of municipalities was further strengthened by the introduction of the *imposta comunale sugli immobili* (ICI), a new local tax on real property (5).

The municipalities provide network services such as transport, water supply, waste disposal and community-based and institutional care for disabled and elderly people (this is done in association with voluntary groups). In addition, they provide social housing, where the preferred structure is a semiautonomous municipal agency or an independent contractor. Larger municipalities provide services for environmental health protection, sanitation and controlling air and water pollution. Other local responsibilities for the environment are described in the next section on sustainable development.

## **2.7 Sustainable development**

Italy has established a Committee for the Implementation of Agenda 21, which serves as a coordinating body for sustainable development. The Committee consists of representatives from the Ministries of Budget and Planning, Environment, Foreign Affairs (includes cooperation), Public Works, Transport, Tourism, Agriculture and Forestry Resources and Finance as well as the Presidency of the Council of Ministers. The Department of Sustainable Development is within the Ministry of Environment and deals mainly with the following functions:

- promoting and coordinating programmes and projects for sustainable development;
- finding financial resources for intervening in environmental protection and recovery;
- formulating and managing programmatic documents submitted to obtain European Union co-financing;
- environmental tax regulations and tariff mechanisms;
- environmental accountability;
- promoting voluntary agreements with private enterprises;
- promoting employment related to the environment;

- promoting environmental research;
- disseminating environmental information to the public;
- drafting the report on the state of the environment;
- updating and managing the National Plan for Sustainable Development; and
- supporting sustainable development objectives in international forums (9).

In April 2001, the Ministry of Environment and regional authorities created a permanent working group to discuss action for sustainable development.

In 1998, the Ministry of Environment began preparing for the new national environmental strategy in accordance with the Sixth Environmental Action Programme of the EU. The new national environmental strategy strongly emphasizes the relationship between environmental quality and people's quality of life, especially in urban areas. The concept of quality of life, as foreseen in the strategy, is mainly in relation to human health, air quality, noise and food security. One of the most important issues is including environmental factors in all major policies and public awareness and participation in environmental decision-making processes (9). In the last decade, environmental competencies have been transferred from the national level to the regional and local levels.

The national level is responsible for defining the environmental quality objectives and for general criteria for the sector policies. The regional level is responsible for strategic planning. The local levels (provinces and municipalities) are responsible for controlling and applying the plans and programmes.

To avoid conflict, the state is also responsible for coordinating and integrating environmental rules and programmes.

## **2.8 Environmental impact assessment**

The Ministry of Environment was created in 1986 through Law 349 of 1986 and the Decree of the Leader of the Cabinet (DPCM) 377 of 1988. The establishment of the Ministry created a point of reference at the national level and provided a unitary political and administrative centre of responsibility for protecting the environment and the landscape.

As previously stated, administrative decentralization has been taking place in Italy since 1997. This means that the regions are now expected to position environmental and spatial planning and territorial matters within a single action, making them responsible for environmental impact assessment.

Although authority has been transferred from the state to the regions, the state maintains the following functions as stipulated in Legislative Decree 112/98:

- works and installations that have an environmental impact on several regions
- works and infrastructure of national and international significance
- industrial installations that have a particular and significant impact, and
- works requiring authorization from the state.

The first region to have procedures in place for environmental impact assessment is the Tuscany region. Its Regional Decree 1541 of 1998 established that the municipal plan should clearly stipulate the inclusion of environmental impact assessment. In addition, Tuscany has established a set of indicators based on an OECD model in relation to water, air, energy, waste, soil and subsoil to assess how they are modified. At the legislative level, the region has also renewed environmental monitoring instruments.

In Emilia-Romagna, a regional environmental impact assessment law from 1990 stipulates that the region, and its provinces and municipalities, must take into account “the early evaluation of environmental and territorial sustainability of the effects coming from their application, also regarding national and European Community laws” within the elaboration and approval processes of their plans. In addition, reference is made to environmental assessment in other sectors, including urban planning.

In 1995, the Italian Environmental Impact Assessment Centre was founded following an agreement between the European Commission and Italy’s Ministry of Environment. The Italian Environmental Impact Assessment Centre is part of the European Network of Environmental Impact Assessment Centres, and its purpose is to promote environmental impact assessment as a systematic tool in which every actor (public administration, economic operators, environmental impact assessment professionals and the local population) that plays a part in the process does so in an appropriate way. The activities of the Centre include:

- catalysing the exchange of data and experience;
- carrying out research;
- producing a newsletter;
- creating data banks on impact assessment;
- preparing manuals with methods for correctly applying environmental impact assessment; and
- developing educational activities (10).

### **2.8.1 Environmental impact assessment and urban planning**

Programmes for Urban Renewal and Sustainable Development (PRUSST) were introduced through a decree by the Ministry of Works in 1998. These Programmes are directed towards the infrastructure of the territory for the implementation of an integrated system of activities that focus on industrial installations, promoting hotel and tourist activities and reclassifying degraded urban areas.

The procedures introduced in Emilia-Romagna are particularly complex. In order to bring about a more balanced distribution of services and infrastructure and to improve the architectural quality of urban space, the region’s analyses take into account architectural, environmental, economic, social and functional degradation, obsolete urban planning, opportunities for the reuse of disused land, assessment of the impact of social and economic mobility on installations, the environment and landscape and the feasibility of interventions based on economic resources that may be exploited (11).

## 2.9 Strategic environmental assessment

The Espoo Convention on Environmental Impact Assessment in a Transboundary Context stipulates the obligations of parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of states to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries. The Espoo Convention entered into force on 10 September 1997. Italy ratified the Espoo Convention on 19 January 1995.

The United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) was adopted in 1998. This Convention links environmental rights and human rights with a special focus on the participation of all stakeholders for the success of sustainable development. Italy ratified this Convention in June 2001.

The Protocol on Strategic Environmental Assessment was adopted in May 2003. This is a supplement to the Espoo Convention. The protocol focuses on the evaluation of the environmental consequences of official draft plans and programmes. Strategic environmental assessment is undertaken much earlier in the decision-making process than environmental impact assessment and is therefore seen as a key tool for sustainable development. In addition, strategic environmental assessment is considered a key concept to help achieve environmental protection and sustainable development and to integrate the environment into sector-specific decision-making (12). Italy was a signatory to this protocol.

In Italy, strategic environmental assessment in national laws has been introduced as a tool for some regional land-planning laws (Valle d'Aosta, Piedmont, Liguria, Tuscany, Umbria, Veneto and Emilia-Romagna), as an extension to plans and projects undergoing environmental impact assessment. In other regions such as Basilicata, the strategic environmental assessment procedure has been introduced for regional laws and is not limited to land planning or environment (that is, administrative organization management) (13).

Some regional laws related to strategic environmental assessment in Italy provide a time frame to allow authorities and the public to express their opinion on new proposals. In Emilia-Romagna, this is the *conferenze e accordi di pianificazione* (13).

Another important step in relation to strategic environmental assessment and transport is one taken by the Member States of the European Conference of Ministers of Transport (ECMT). The ECMT is an intergovernmental organization established in 1953 that aims to improve the utilization and to ensure the rational development of European transport systems of international importance. In May 2003, the ECMT passed Resolution 2003/1 on Assessment and Decision-making for Integrated Transport and Environment Policy, which recommends the systematic evaluation of the economic, social and environmental effects that underpin all transport plans and programmes and all major transport sector investments, acknowledging the effectiveness and importance of strategic environmental assessment. Italy is a member of the ECMT and a signatory to this resolution.

### **3. The health impact assessment process – material and methods**

The coordinator of the Italian Healthy Cities Network and the WHO project manager coordinated the introduction of the HIA process. The HIA process was actually introduced from March to September 2004. An HIA toolkit was developed to be able to introduce and implement the HIA process. The toolkit presented the background to HIA, the technical aspects of the process (from screening to evaluation) and how to practically implement the process. The toolkit was translated into Italian and was used by the local officers in Bologna during the whole process.

First, the literature on the political and executive system at the national and local level in Italy was searched. Understanding the political processes is crucial in implementing the HIA process, since it should assess proposals by different stakeholders at early stages in the political decision-making process. Chapter 2 describes the political and administrative processes in Italy.

When the political processes were mapped, three HIA meetings were planned and held in Italy. The first meeting started off the HIA introduction in Italy, aiming to reach a wide audience. This meeting intended to raise awareness about HIA and gain political commitment and support. This meeting was attended by 135 participants, including politicians, administrators and researchers. The second meeting provided in-depth training of HIA for the 35 local officers in Bologna and other cities that were going to carry out the HIA. External experts carried out the training about the technical and practical processes of HIA. In addition to these meetings, there have been national meetings for raising awareness and training in Italy. These have not been within the PHASE Project but contribute to the results of the HIA introduction.

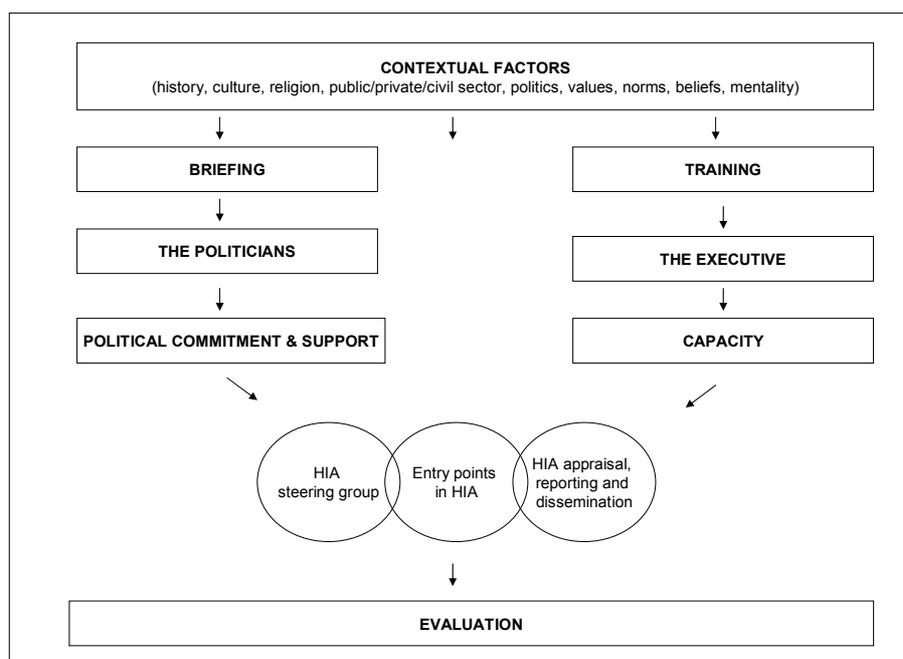
A steering group was created consisting of the 12 people from 6 of the departments to be responsible for the HIA: the Department of Health and Department of Urban Planning of the Municipality of Bologna, the University of Bologna, the Agency for Regional Health Care Services of Emilia-Romagna, the Local Health Services Agency of Bologna and staff working on the Last Minute Market project. The steering group attended the training events and started after the second meeting by structuring how to introduce the proposal for the Last Minute Market to be assessed using HIA. It was planned to both introduce the proposal for the Last Minute Market in the Municipality and to assess the likely social and health effects of the proposal during the pilot period.

A third meeting was held in September to evaluate the HIA process. The evaluation was divided into two parts: an interview as a group discussion and filling in an evaluation form. All the participants took part in both parts: the administrators, the healthy city coordinator and the researchers. First, all the participants were interviewed for about two hours as a semistructured group discussion. There was no need for translation during the meeting, which was in English. The interview was tape-recorded. Second, the participants filled in an evaluation form about the HIA process individually after the interview was concluded. The form consisted of 67 questions assessing the participants' opinions and knowledge about HIA, the application of HIA and the use and understanding of the HIA toolkit. This study only analysed the first two issues, since the results of the HIA toolkit have been used to improve the toolkit.

## 4. Results of the health impact assessment process

The results of the HIA process were analysed through the process of implementing HIA (Fig. 1). An HIA process is always introduced into a specific context where the country, city and population have a certain political, economic and social background. This background and current status always influences new processes. Fig. 1 shows the two strands within the HIA introduction: a political and an executive strand. Politicians are being briefed in various ways, which leads to political commitment and support. The executive strand is the administrative officers trained in HIA, since these officers carry out the HIA appraisal. The training of the executive builds capacity. Both strands influence the creation of a steering group, the entry points of HIA and the HIA appraisal, reporting and dissemination. After these steps have been taken and the HIA process is introduced, the process should be evaluated to learn from and improve the process. The HIA process that was piloted in Bologna is being analysed through the stages in Fig. 1.

Fig. 1. The HIA process in Bologna, Italy



### **Contextual factors**

When the PHASE Project started, the City of Bologna had carried out three city health profiles. Two subjects, transport mobility and social cohesion, had been identified as health priorities. In June 2004, a local government election was held, and the election marked a shift from the right to the left, which led to new initiatives about social participation and citizens' committees.

These committees took action to put more health priorities on the political agenda, such as urban renewal, services for students and pollution control. The political change also led to adjustments in the municipal administrative management, such as the creation of new departments.

### *Briefing for political commitment and support*

The first meeting in Bologna aimed to present HIA to both national and local institutions, different stakeholders, health technicians, the general public as well as the mass media to raise awareness and interest about the HIA process. The long-term objective was to stimulate the local politicians' commitment and support to applying a systematic HIA approach in Bologna. The focus was also on the Italian Healthy Cities Network. The Network should serve as a catalyst to raise awareness, provide training on HIA and to build local capacity for HIA in Italy. The added value of bringing in the Network was to support the cities with HIA training and to transfer international, national and local experience across cities.

The meeting included briefing on the background and rationale of HIA, its technical stages and the practical implementation of the process. Several agencies and institutions, including the Local Health Services Agency of Bologna, the Health Services Department and Agency for Regional Health Care Services of Emilia-Romagna and the National Research Council in Pisa, discussed and analysed the screening of different proposals (transport and mobility, gender and equity and an urban renewal project).

In addition, another similar event was being held in Italy. The meeting also aimed to raise awareness about HIA and the Italian Healthy Cities Network. Even though this meeting was not within the PHASE Project, it highly contributed to the awareness-raising taking place in Italy at that time.

In the evaluation of the HIA process, all participants said that this step is of great importance. Briefing politicians by raising awareness is one way to inform the politicians. The officers said that the HIA process starts with a political commitment, which means that they can only carry out the process if there is enough support. Commitment and support therefore differ. Even if there is a commitment to carry out HIA, there may not always be enough support. The evaluation showed that, in Bologna, the political support and commitment are very important for any process to be introduced. During the first phase of the implementation, there was clear commitment to and support for HIA. However, the major obstacle was that a local government election was to be held in the middle of the pilot period. The election was held in June 2004, but the new government did not really start its term until the beginning of September, and there was a transition period during the summer. The officers who had a commitment for HIA from the former government had to obtain renewed approval and commitment within the new one. The evaluation showed that the process was therefore delayed. However, the new government eventually gave commitment and support to HIA, and the formal decision was to be taken in April 2005.

### *Training the executive for capacity-building*

No participant had any knowledge of or training in HIA before this project started. However, almost all had knowledge about the determinants of health and their overall correlation with policy and health status. They had also worked with environmental impact assessment, which provided them with good knowledge about HIA.

A second meeting was held in June 2004, where the officers from Calderara di Reno, Milano, Modena, Ancona, Siena, Udine, Venezia, Zero Branco (Treviso), Forli, Vittorio Veneto and Pisa were trained in HIA. A representative from the National Institute of Public Health was also present. The Italian Healthy Cities Network was introduced, and the project and the

implementation of HIA were linked to sustainable urban development. The participants discussed both difficulties and enabling factors of integrating HIA by presenting case studies on how HIA could be implemented.

In addition to this training event, another similar scientific meeting was held during the same period of time but not integrated into this PHASE Project. The cities of the Italian Healthy Cities Network were invited to attend a scientific conference organized by the Italian National Research Council in Rome. The two-day seminar focused on HIA methods and experience at the local level, with in-depth analysis of the differences between HIA and environmental impact assessment. In the evaluation, the officers said that the this project provided insufficient training, and they would have liked to have more. The officers strongly suggested expanding the training and the documents to include practical implementation of the HIA process, not just in theory. Due to this, the HIA process is time-consuming, and having enough political commitment and support is important in carrying out the HIA. To correct these difficulties, the participants expressed the need for more support from colleagues and politicians.

### *Steering group*

After both meetings, a steering group was created in Bologna. The steering group consisted of 12 people with different backgrounds (technicians, local administrators and staff working on the Last Minute Market project). The steering group was responsible for the HIA and for carrying out the HIA pilot study. A project was selected, called the Last Minute Market, and rapid scoping was carried out. A series of internal meetings was organized to inform about the Last Minute Market and to plan for an assessment of health and social effects of the project.

The evaluation showed that several forms of intersectoral work are already being built up in Bologna. However, the forms are not used systematically, but the officers said that they are used to working with people from different departments and institutions, such as for environmental impact assessment. The officers also said that health is not high on the political agenda, and this may cause problems with working intersectorally.

### *Entry points*

The best available entry points should be found to start the HIA process by mapping the political process and other forms of impact assessment. In Bologna, some possible entry points were identified for the pilot work on HIA. First, the city had already produced three city health profiles (1999, 2001 and 2002). Secondly, the 15-year plan for Bologna and the regional city health development plan had set in place mechanisms for intersectoral cooperation and discussions about the links between social issues and the environment: transport (mobility) and social cohesion were identified as health priorities at that time. Finally, the city was going to apply for membership of the WHO European Healthy Cities Network in the fourth phase (2003–2007).

Some obstacles were also identified such as lack of a national policy on HIA, insufficient awareness of HIA and lack of case studies and appraisal reports at the local level in Italy. This fact could discourage institutions from adopting innovative strategies and methods such as HIA at the local level.

### *HIA appraisal, reporting and dissemination*

The selected pilot project in Bologna, an ongoing project Last Minute Market, was chosen as the most suitable for this short period of time and because it was a relevant project to assess the effects on the health of vulnerable population groups. The core idea of Last Minute Market is to collect and use almost expired food from supermarkets (the commercial date is always more strict than the sanitary rules for the food's life cycle). The food was thereafter given to homeless and poor people through a number of associations. The most innovative aspect is that this project is self-sustainable; few funds are required, as the distribution is done in the nearby neighbourhood, which means no cost for transport. The project was already ongoing in several other cities in the Emilia-Romagna region and in Ferrara with successful results. Moreover, a specific national government law allowing government subsidies had been presented to facilitate and to encourage the adoption of the Last Minute Market project at the local level. For all these reasons, the Last Minute Market project had reached growing relevance and received attention among politicians and mass media beyond the local level.

Based on such encouraging results, the Last Minute Market staff had started a pilot test in Bologna by involving one mall and one charity in the suburban area of the city. No contacts had been taken at the political or institutional level. The Last Minute Market project had already assessed environmental, nutritional and economic aspects, but it had not assessed any social or health effects, and this was the focus of the pilot study of the Last Minute Market.

The evaluation of the pilot showed that this was not an easy task for the steering group to carry out since there had to be political commitment and support for both the Last Minute Market project and the HIA process. The project and the HIA process had not yet been introduced in Bologna. In addition, a local government election was to be held in early June. All these factors prevented the steering group from carrying out the HIA appraisal report. However, the officers were seeking the necessary political commitment and support during this time. Even though the process was heavily delayed, a formal agreement was signed on 7 March 2005 between the Municipal Health Sector and the other actors involved in the steering committee. This agreement makes it clear that the monitoring of the Last Minute Market project will also involve the determinants of health and social cohesion, analysing health and social consequences throughout the project's duration.

### *Evaluation*

A multisectoral Steering Committee was created based on the recommendations of the evaluation meeting in September 2004. The committee was promoted by various political representatives in the Department of Health of the Municipality of Bologna. It included representatives of the retail trade sector, the association of local merchants, nongovernmental (charitable) organizations, the Agency for Regional Health Care Services of Emilia-Romagna and the Agency for Environmental Protection of Emilia-Romagna. They agreed on and signed a preliminary consortium agreement that demonstrated their commitment to implement the Last Minute Market project in Bologna. This was followed by a series of one-to-one meetings with all the actors involved. At the end of September 2004, a meeting was held and attended by 50 people, including the HIA pilot project working group, the directors of the local districts, the Deputy Mayor for Health and the Vice-Mayor, to introduce and discuss the City Health Plan for 2005. The implementation of the Last Minute Market project in Bologna was introduced among the activities planned for 2005.

## 5. Enablers and barriers of the health impact assessment process in Italy

Barriers and enablers to HIA in Italy are likely to have a regional dimension. Italy's 20 regions have legislative powers and provide a planning framework for many activities at the provincial and municipal levels.

Examining enablers and barriers to HIA can improve the perspectives on the possibility of introducing HIA in Italy. Enablers are factors that have the potential to aid in introducing HIA, and barriers may hinder its introduction. Enablers and barriers can be divided into four categories: evidence; political and policy; institutional; and resources (Table 1).

Table 1. Enablers of and barriers to introducing HIA in Italy

Category	Enablers	Barriers
<b>Evidence</b>	<p>Availability of local data on the determinants of health in Bologna: city health profiles have been completed in about 20 cities in the Italian Healthy Cities Network, and further work on profiles is a priority for the Network</p> <p>Availability of international evidence on the links between transport, environment and health (such as WHO's work in this field)</p>	<p>Lack of case studies of HIA at the local level in Italy</p> <p>Published assessments are often in English, making the evidence base inaccessible</p>
<b>Political and policy</b>	<p>More active decentralization of power from the state to regional and local authorities</p> <p>A National Health Plan that includes strategies on promoting healthier lifestyles, improving the environment, promoting social equity and fighting the major causes of death</p> <p>The National Environmental Strategy is in accordance with the Sixth Environmental Action Programme of the EU, including the key thematic strategy on the urban environment (14), which is still under consultation but strongly focuses on impact assessment</p> <p>Italy is a party to the Espoo Convention on Environmental Impact Assessment in a Transboundary Context and the United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) and a signatory to the Protocol on Strategic Environmental Assessment</p> <p>Programmes for Urban Reclassification and Sustainable Development (PRUSST) use an integrated system of activities</p> <p>Some regions use of strategic environment assessment, mostly in relation to spatial planning or environment</p> <p>Italy is a signatory to ECMT Resolution 2003/1 on Assessment and Decision-making for Integrated Transport and Environment Policy</p>	<p>Lack of priority given to national policy on HIA</p> <p>Lack of awareness of HIA</p> <p>National health policy focus is not focused on broad determinants of health</p> <p>Policy saturation and fatigue at the local level (many new strategies and methods are promoted at the local level)</p>

Category	Enablers	Barriers
<b>Institutional</b>	<p>Trends towards decentralizing state functions, especially in relation to economic, environmental and spatial planning</p> <p>National Health Plan recognizes the decentralization of power to the regions</p> <p>The National Institutes for Scientific Research, although financed by the Ministry of Health, are spread throughout the regions</p> <p>Transfer of environmental competencies from the national to the regional and local levels with recognition of the relationship between environment and health</p> <p>The 15-year plan for Bologna and the regional city health development plan have set in place mechanisms for intersectoral cooperation</p> <p>There is an Italian Centre for Environmental Impact Assessment</p> <p>The Italian Healthy Cities Network can provide a mechanism to provide training and crystallize learning on HIA to build local capacity for HIA within Italy</p>	<p>The regional level has some responsibilities in relation to health and sustainable development, requiring policy coordination with the local level</p> <p>Through decentralization, regions and not local authorities are expected to position environmental and urban planning matters within a single action, which also includes environmental impact assessment</p> <p>Local working practices are not intersectoral</p>
<b>Resources</b>	<p>Gaining access to capacity and resources available for other types of impact assessment by integrating health into these assessments</p> <p>Possibility to access funding through European Union sources</p> <p>Core HIA materials have been translated into Italian through the PHASE Project</p> <p>Added value of the Italian Healthy Cities Network (sharing costs through exchange; supporting cities with training; translating international experience; etc.)</p>	<p>HIA tools and guidance not available in Italian</p>

## 6. Concluding remarks

Technicians, politicians, representatives of associations, the Agency for Regional Health Care Services of Emilia-Romagna, retailers and others jointly contributed various skills, roles and backgrounds required in applying HIA to the Last Minute Market project. This helped both the process of adopting the Last Minute Market by local institutions and maximized the positive impact on health and social cohesion in the project's final definition.

The creation of a multisectoral Steering Committee and the signing of a consortium agreement facilitated the implementation of the project in terms of time, contacts, resources and reduction of conflicts among different considerations on controversial issues (such as food safety standards). Further, participation in the PHASE Project and the necessity of following a precise planning period helped to raise awareness to get the political commitment during the political election period and after the political change in Bologna's administration in June 2004. Without the HIA pilot, the Last Minute Market project would probably not have been adopted at the institutional level with an official agreement between the Municipality of Bologna and the main institutional actors (Last Minute Market staff had already set up a series of local contacts with retailers and charity associations in Bologna). The final recommendations emerging from the HIA led to the adoption of the project by the local institutions to promote social cohesion.

The experience of training and applying the HIA process at the local level helped to build a shared awareness among the people involved of the complexity of how decisions may directly and indirectly affect people's health. Creating awareness about this impact among politicians and policy-makers is therefore crucial. Indeed, the added value that PHASE Project offered was the opportunity to take part in creating the HIA toolkit through intersectoral work and in adapting this to the local context. The cooperative and learning-by-doing method of HIA – even if it turned out to be more complex and demanding than initially expected – helped people to understand the HIA process and to adopt the instruments to which they had contributed.

Finally, the Municipality of Bologna is promoting and disseminating the results and HIA instruments of the PHASE Project in two directions:

- at the national level, by addressing the member cities of the Italian Healthy Cities Network; and
- at the regional level, by strengthening the collaboration between the University of Bologna, the Emilia-Romagna region and other local authorities on HIA with a series of contacts and local meetings aimed at creating a specific HIA working group.

At the local level, the HIA application has also influenced the contextual factors, as decision-makers now define or adopt new projects based on specific awareness of the HIA values and experience arising from the PHASE Project.

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