

Promotion of physical activity and contrast to sedentary lifestyle: public health programmes in Lombardy



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Lecco
Statua di Alessandro Manzoni

Regione Lombardia

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Report - May 2014


Regione Lombardia

1. Introduction

Investing in prevention and control of chronic diseases - degenerative diseases (chronic non-communicable diseases - NCD) allows to reduce premature deaths, preventable morbidity and disability, and to improve the quality of life and well-being of individuals and society. Not less than 86% of deaths and 77% of the disease burden in the WHO European Region are caused by this large group of disorders that have in common¹ determinants (social, economic, etc.), modifiable risk factors and prevention strategies (Figures 1 and 2).

Figure 1 - "Causes of chronic diseases" - "Preventing chronic disease: a vital investment" WHO, 2008 "

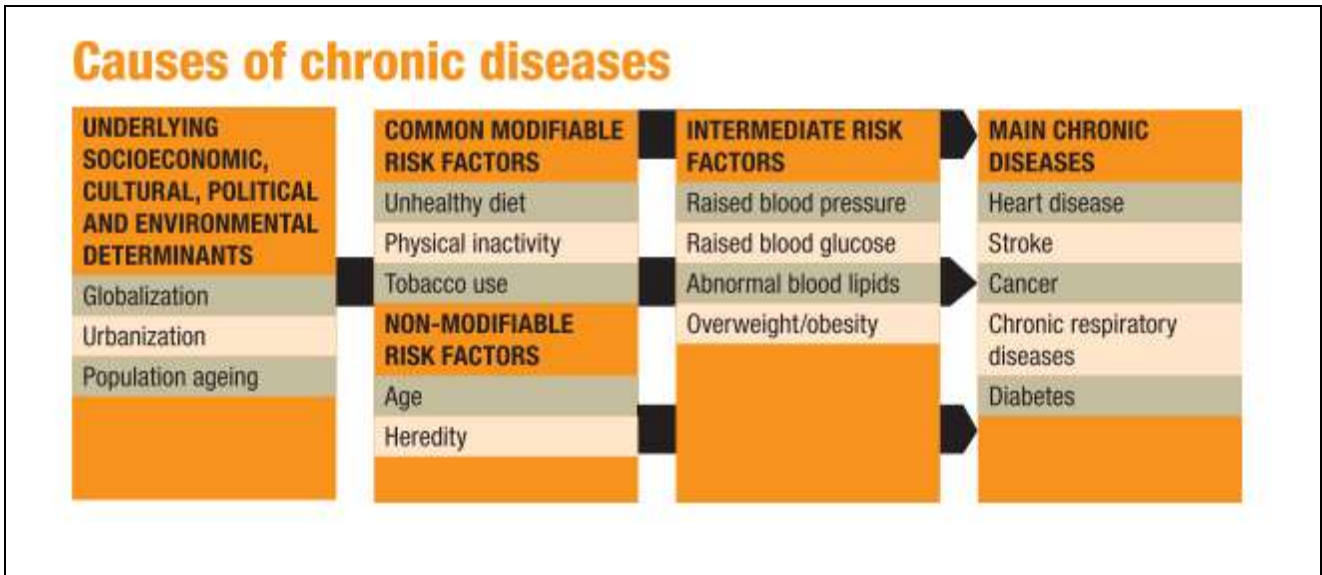


Figure 2 – Noncommunicable diseases: 4 diseases, 4 modifiable risk factors

Noncommunicable Diseases
4 Diseases, 4 Modifiable Shared Risk Factors

	Tobacco Use	Unhealthy diets	Physical Inactivity	Harmful Use of Alcohol
Cardio-vascular	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Diabetes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cancer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Chronic Respiratory	<input checked="" type="checkbox"/>			

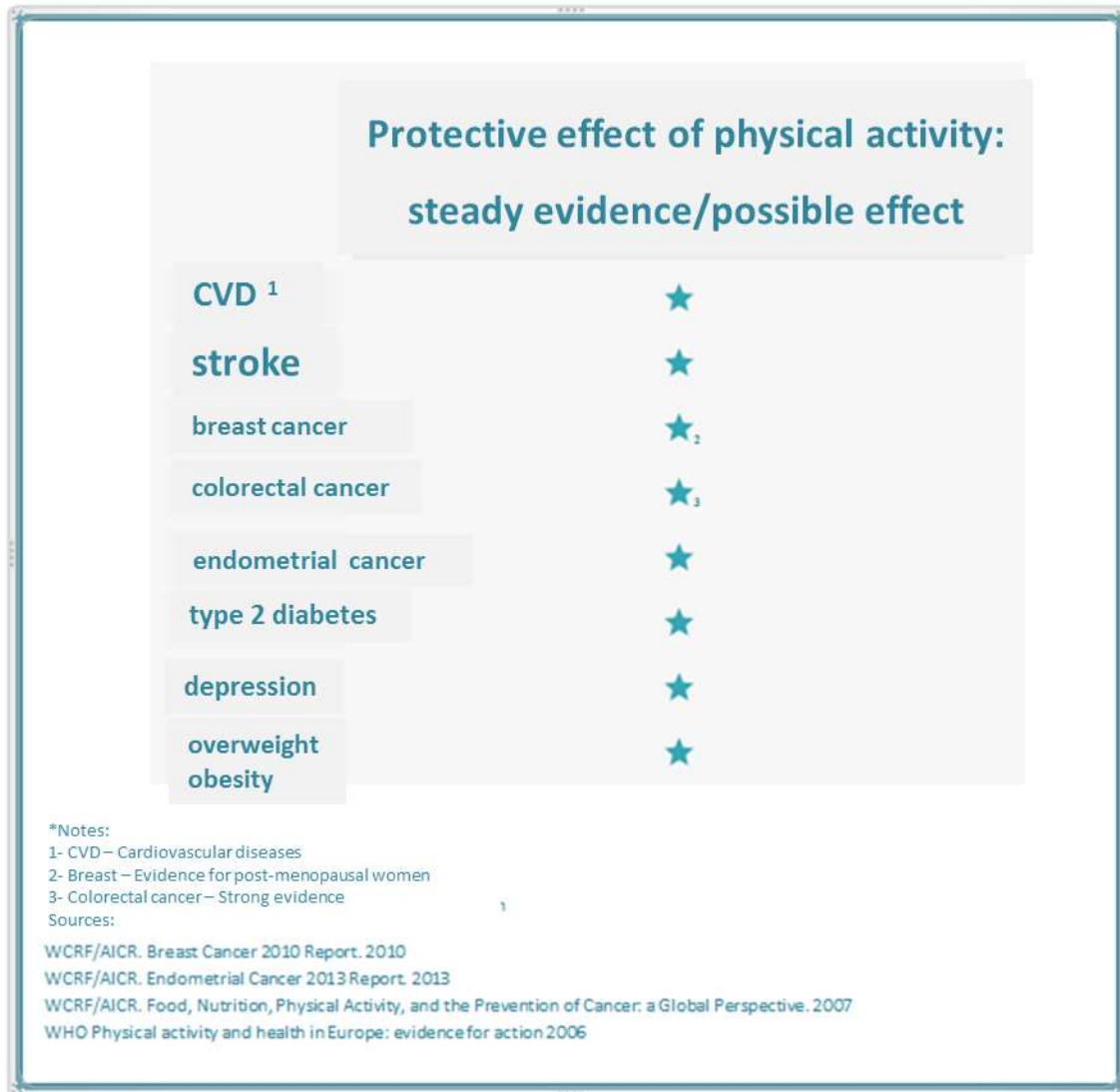
Noncommunicable Diseases World Health Organization

World Health Organization

¹ "Action Plan for implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012-2016 WHO Regional Office for Europe."

Promoting "healthy lifestyles" is therefore an excellent investment to counter what is now called "the epidemic of chronic degenerative diseases".

Figure 3 - Correlations between protective effects of physical activity vs non-communicable diseases

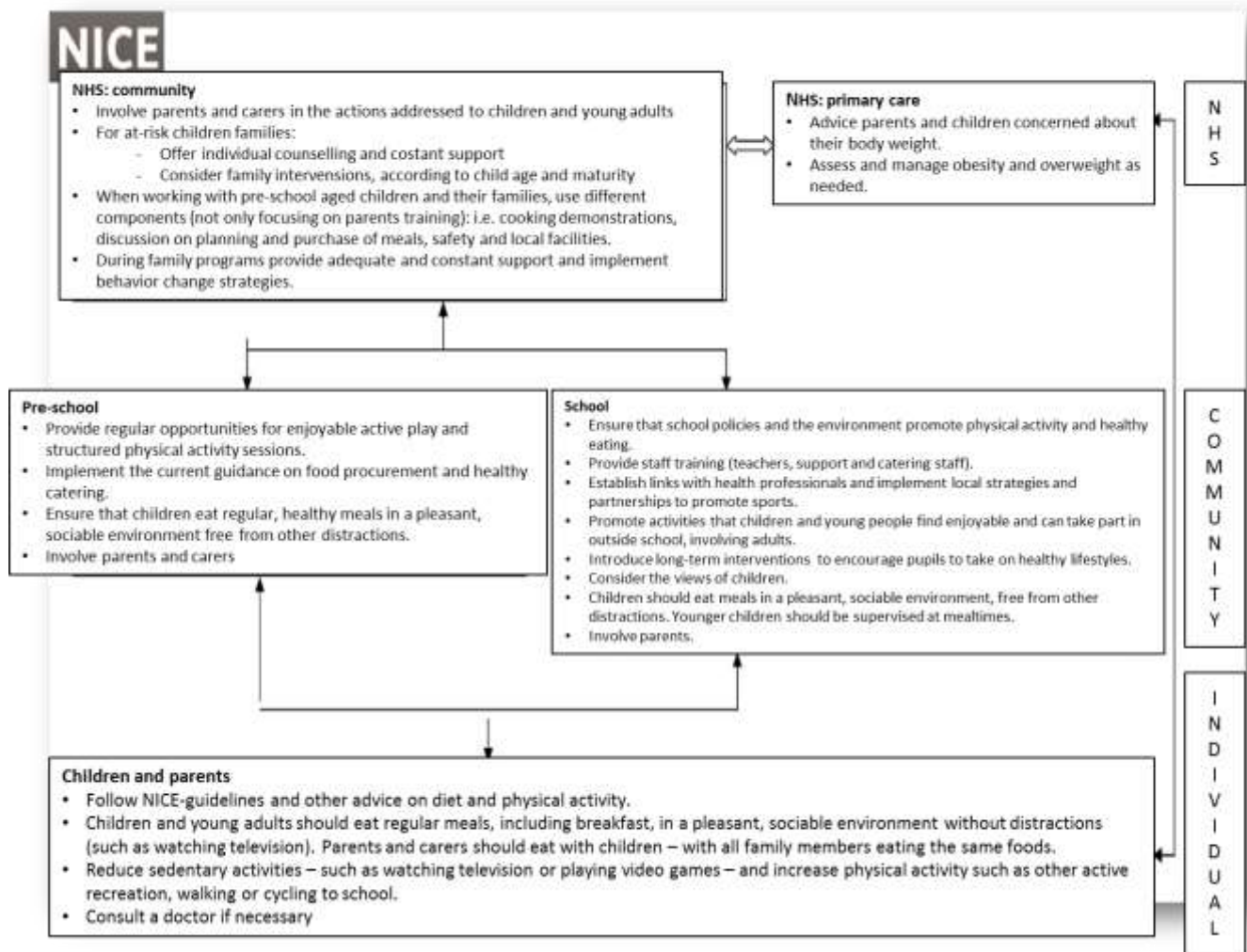


Source: DG Salute Elaboration

Scientific evidence and international guidelines (WHO European Region) indicate the need for integrated preventive interventions (Figure 4), aimed at facilitating the adoption of healthy lifestyles, based on strategies of health promotion both at population²-(or community) and individual-level (i.e. motivational counseling techniques for people who already present risk factors (see Figure 1)).

² Health promotion programmes and in particular lifestyles and environment conducive to health, aimed at facilitating the adoption of healthy lifestyles, based on a multicomponent (inclusive of all health determinants), according to life course and setting (schools, workplaces, local communities, health service) and intersectoral approach (education, social, urban planning, transports, agriculture policies, etc.), with the involvement of all, from local authorities to local community (community empowerment).

Figure 4 - Model of integration between NHS (National Health System) community programmes and individual interventions (primary care) in the pathway of prevention of obesity in children and adolescents



Source: NICE Clinical Guideline 43 – 2006

An active lifestyle, with daily practice of physical activity, carried out according to the recommended levels (Figure 5), contributes not only to the prevention of major chronic degenerative diseases, but also to promote of psychological well-being by reducing anxiety, depression and loneliness, and to support an "active and healthy aging", increasing the degree of autonomy of the elderly and reducing the risk of falls.

Figure 5 - "Global Recommendations on Physical Activity for Health" © WHO 2010³

RECOMMENDED LEVELS OF PHYSICAL ACTIVITY FOR HEALTH

5–17 years old

For children and young people of this age group physical activity includes play, games, sports, transportation, recreation, physical education or planned exercise, in the context of family, school, and community activities. In order to improve cardiorespiratory and muscular fitness, bone health, cardiovascular and metabolic health biomarkers and reduced symptoms of anxiety and depression, the following are recommended:

1. Children and young people aged 5–17 years old should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily.
2. Physical activity of amounts greater than 60 minutes daily will provide additional health benefits.
3. Most of daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week.

18–64 years old

For adults of this age group, physical activity includes recreational or leisure-time physical activity, transportation (e.g walking or cycling), occupational (i.e. work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

In order to improve cardiorespiratory and muscular fitness, bone health and reduce the risk of NCDs and depression the following are recommended:

1. Adults aged 18–64 years should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.
2. Aerobic activity should be performed in bouts of at least 10 minutes duration.
3. For additional health benefits, adults should increase their moderate-intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate- and vigorous-intensity activity.
4. Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.

65 years old and above

For adults of this age group, physical activity includes recreational or leisure-time physical activity, transportation (e.g walking or cycling), occupational (if the person is still engaged in work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

In order to improve cardiorespiratory and muscular fitness, bone and functional health, and reduce the risk of NCDs, depression and cognitive decline, the following are recommended:

1. Adults aged 65 years and above should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.
2. Aerobic activity should be performed in bouts of at least 10 minutes duration.
3. For additional health benefits, adults aged 65 years and above should increase their moderate-intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate- and vigorous-intensity activity.
4. Adults of this age group with poor mobility should perform physical activity to enhance balance and prevent falls on 3 or more days per week.
5. Muscle-strengthening activities should be done involving major muscle groups, on 2 or more days a week.
6. When adults of this age group cannot do the recommended amounts of physical activity due to health conditions, they should be as physically active as their abilities and conditions allow.

³ "Global Recommendations on Physical Activity for Health" ©WHO 2010.

2. MEASURING SEDENTARY LIFESTYLES

2.1 Europe

"Special Eurobarometer 412 - Sport and physical activity" published by the European Commission in March 2014 showed that 41% of Europeans exercise or play sport at least once a week, while 59% never or rarely does (Figures 4 and 5).

Figure 6 - Citizens who NEVER exercise or play sport (EU average 42%, Italy 60%)

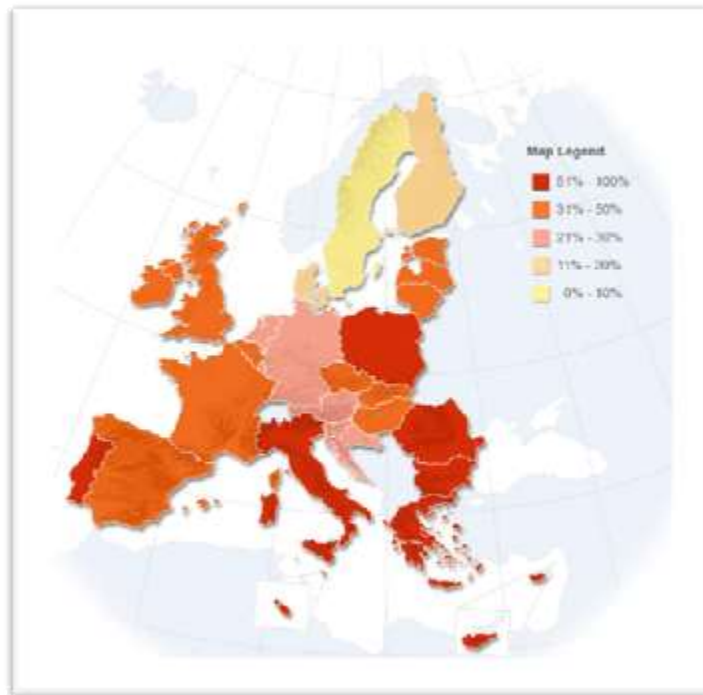
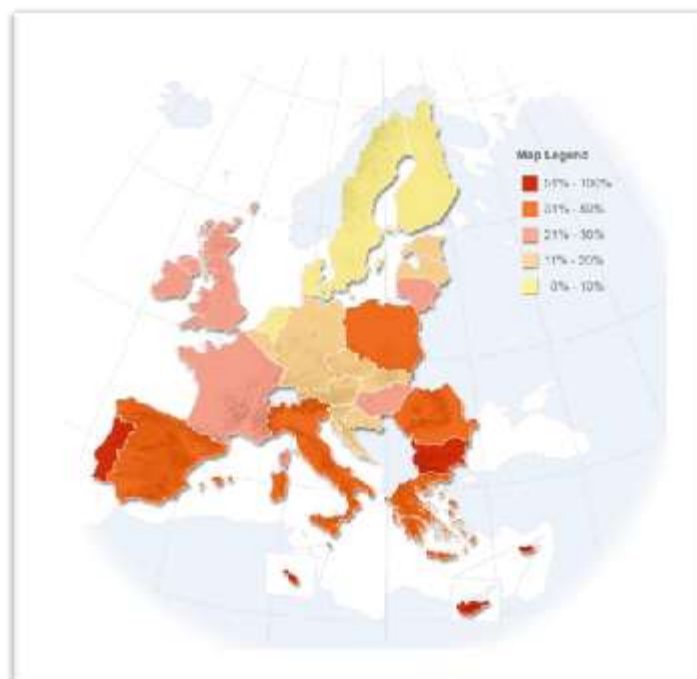


Figure 7 - Citizens who NEVER engage in other physical activities such as cycling, dancing, gardening, etc. (EU average 30%, Italy 50%)



2.2 ITALY

In 2013, in Italy 30% of people aged 3 or over declared to practice one or more sports in their free time; among these 21,3% play sports on an ongoing basis and 8,7% only occasionally. People doing physical activity, even if not playing sports, are 27,7%, while 42% are sedentary⁴.

Tab. 1 Persons aged 3 years or over who play sports or some physical activity and sedentary people by region - Year 2013 (%)

REGIONS GEOGRAPHICAL AREAS	Playing sport	On which bases:		Practicing only some physical activities	Not practicing any sport or physical activity	Not reported
		ongoing	occasionally			
Piemonte	29,1	19,3	9,7	35,1	35,7	0,2
Valle d'Aosta/Vallée d'Aoste	40,5	28,1	12,4	28,4	31,0	0,1
Liguria	27,4	20,8	6,5	29,2	43,2	0,2
Lombardia	35,7	25,8	9,9	29,9	33,8	0,6
Trentino-Alto Adige/Südtirol	47,8	30,0	17,8	36,8	15,0	0,4
Bolzano/Bozen	52,3	34,4	17,9	32,6	14,2	0,9
Trento	43,4	25,8	17,6	40,7	15,9	-
Veneto	37,7	26,7	11,0	37,4	24,8	0,1
Friuli-Venezia Giulia	38,3	26,5	11,9	32,5	28,7	0,4
Emilia-Romagna	35,8	26,0	9,8	32,6	31,4	0,2
Toscana	32,7	24,2	8,5	29,3	37,6	0,3
Umbria	30,9	21,2	9,7	28,0	41,1	-
Marche	32,9	23,7	9,2	31,0	35,8	0,3
Lazio	31,7	23,7	8,0	23,3	44,5	0,4
Abruzzo	26,9	19,8	7,1	27,9	44,7	0,5
Molise	23,5	17,7	5,9	25,2	50,9	0,4
Campania	17,6	12,6	4,9	21,1	60,9	0,4
Puglia	25,0	17,2	7,8	19,6	54,8	0,6
Basilicata	24,3	17,4	6,9	20,8	54,7	0,2
Calabria	20,2	14,2	6,0	19,3	60,1	0,3
Sicilia	20,9	13,1	7,8	19,1	59,6	0,3
Sardegna	30,2	21,9	8,3	30,5	39,1	0,2
North-West	33,1	23,5	9,5	31,2	35,2	0,4
North-Est	37,9	26,7	11,2	35,0	26,9	0,2
Central	32,1	23,7	8,4	26,6	41,0	0,3
North-Central	34,2	24,5	9,7	30,9	34,5	0,3
South	22,0	15,2	6,8	21,4	56,2	0,4
Italy	30,0	21,3	8,7	27,7	42,0	0,4

Source: Istat, Indagine multiscopo sulle famiglie "Aspetti della vita quotidiana"

⁴ It is considered sports activities those practised in free time on ongoing basis or occasionally in the population aged 3 and over, excluding people who play sports world for professional reasons (professional athletes, teachers, coaches). Among those who practice only some physical activity are included those who engage in hobbies that involve movement in some way (walking at least two miles, swim, ride a bike or other); sedentary are those who say they do not play sports, or other forms of physical activity.

2.3 LOMBARDY

In Lombardy sedentary lifestyle is common in childhood, adolescence and among adult population, although with less critical situations than in other areas of the country.

Some relevant data by age groups are reported below.

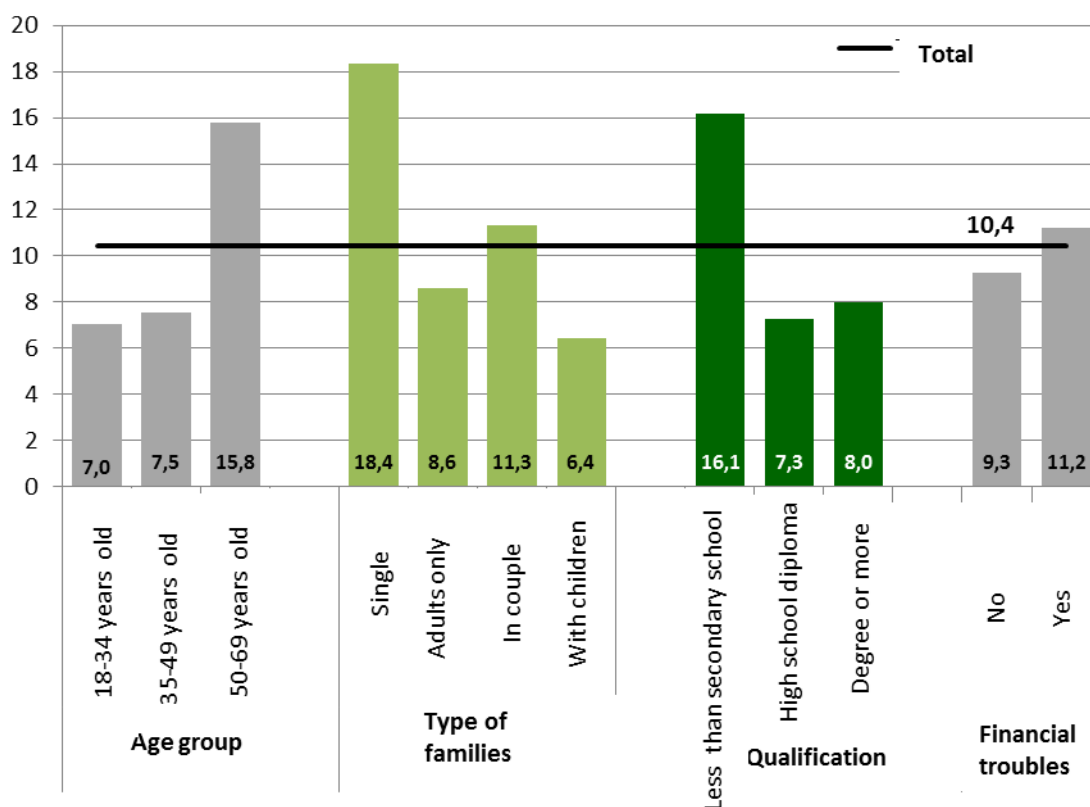
2.3.1 General and adult population

Tab. 2 Persons aged 3 years or over who play sports or some physical activity and sedentary people, in Lombardy - Year 2013 (%)

Playing sport	On which bases:		Practicing only some physical activities	Not practicing any sport or physical activity	Not reported
	habitually	occasional			
35,7	25,8	9,9	29,9	33,8	0,6

Source: Istat, Indagine multiscopo sulle famiglie "Aspetti della vita quotidiana"

Figure 8 – Sedentary population aged 18-69 according to some socio-demographic characteristics. Lombardy, 2013 (%)



Source: "Sistema integrato di raccolta e analisi dati (sorveglianza) su adozione di pratiche preventive e stili di vita favorevoli alla salute nella popolazione in regione Lombardia" - Ricerca Éupolis DG Salute - 2013

2.3.2 Children in primary schools

Table 3	Lombardy 2012	Italy 2012
Sedentary children*	16,7%	17,4%
Children who played outdoors the afternoon before the survey	69,2%	67,2%
Children who played sports activities the afternoon before the survey	45,9%	46,2%
Children engaged in physical activity at least 1 hour a day for 5-7 days a week	13,8%	16,1%

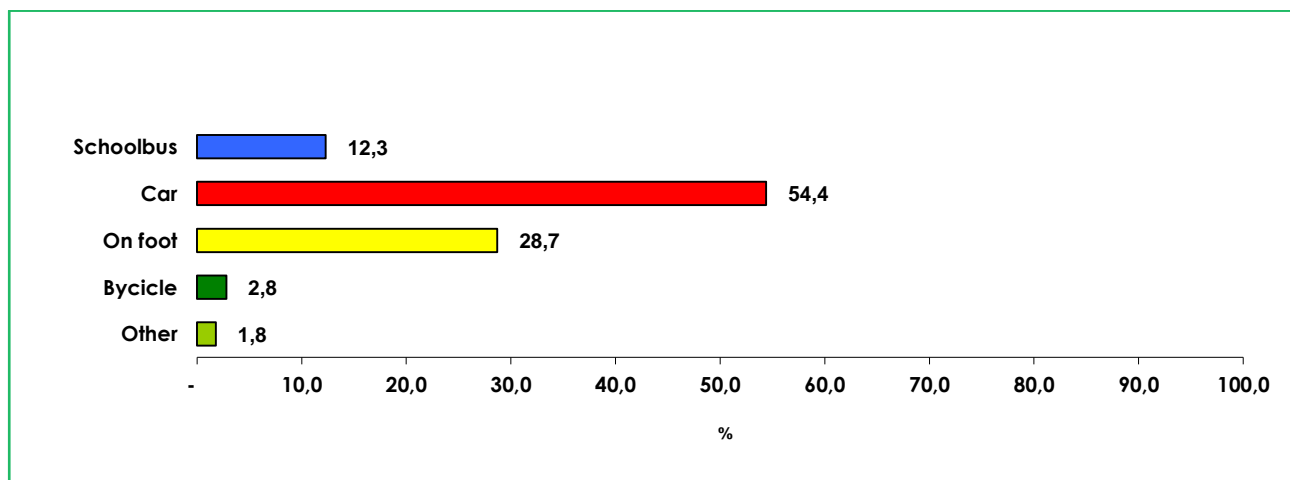
(*The day before the survey they did not physical activity in school or sports nor played outdoors in the afternoon)

Source: Sistema di sorveglianza OKkio alla SALUTE 2012 (ISS, Ministero Salute, Regione Lombardia)

Table 4 – Sedentary children according to gender and residency area	
Characteristics	%
Gender	
Male	16,1
Female	17,3
Residency area	
<10.000 inhabitants	16,4
10.000-50.000 inhabitants	21,2
>50.000 inhabitants	13,0
Metropolitan area/ peri-urban area	14,6

Source: Sistema di sorveglianza OKkio alla SALUTE 2012 Istituto Superiore di Sanità, Ministero della Salute – Regione Lombardia

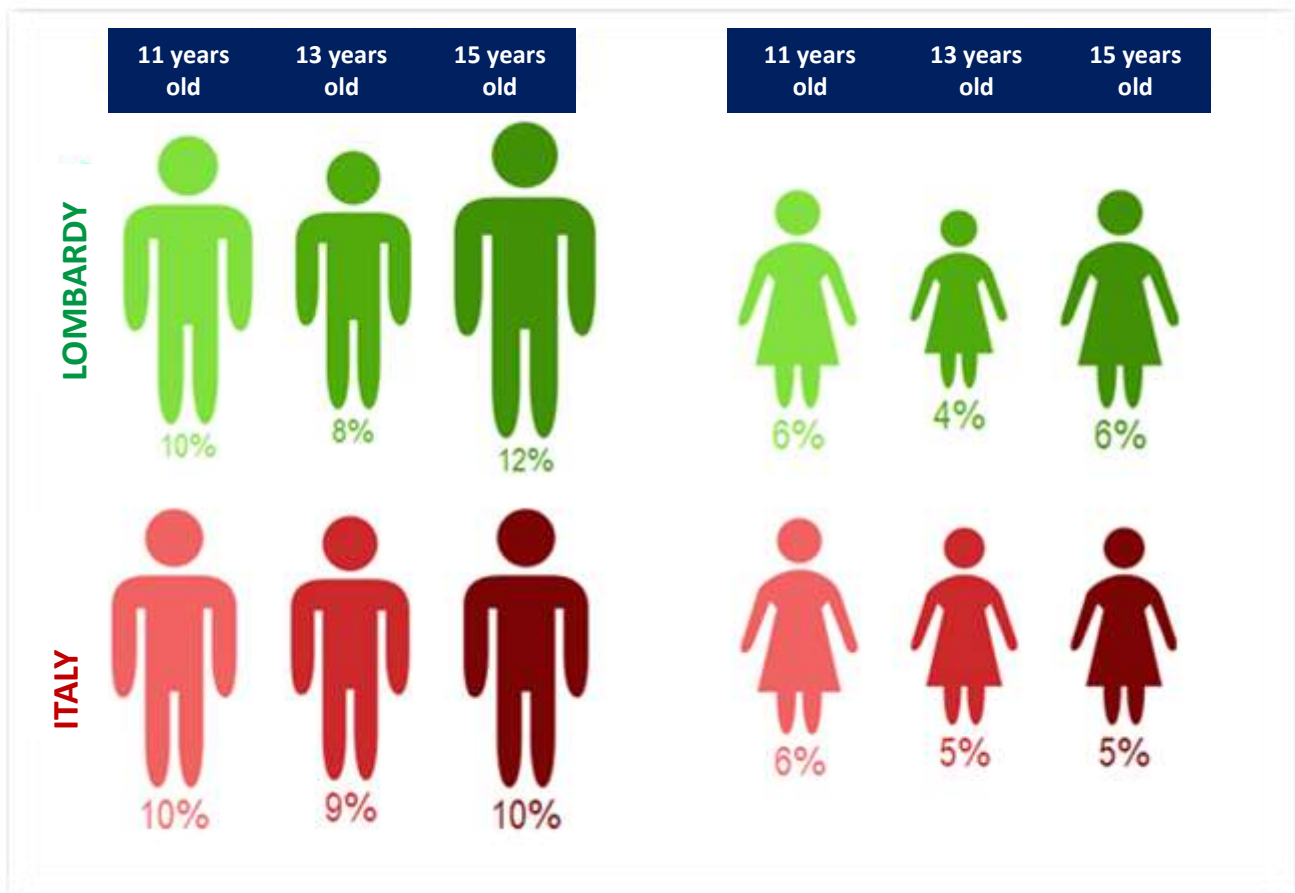
Figure 9 – Means of transport children use to go to school in Lombardy.



Source: Sistema di sorveglianza OKkio alla SALUTE 2012 – ISS, Ministero della Salute – Regione Lombardia

2.3.3 Girls and boys in secondary schools (aged 11 – 15)

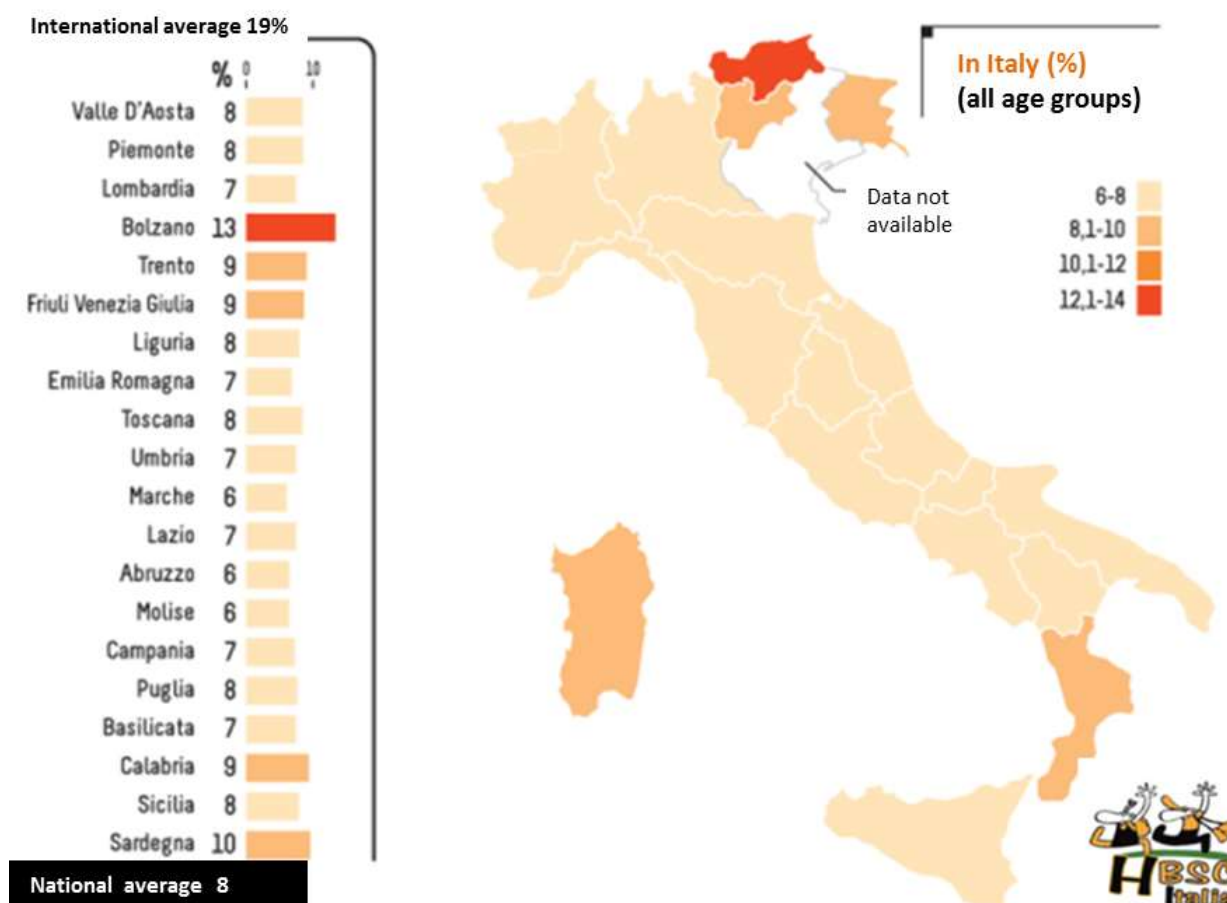
Figure 10 - Physical activity in adolescents (aged 11-1) – Lombardy



Source: Studio internazionale HBSC 2010 (Comportamenti legati alla salute in ragazzi in età scolare)
Ministero Salute, MIUR, Università degli studi di Torino, Regione Lombardia

Figure 11 – Physical activity in adolescents (aged 11-15) – Italian regions

ADOLESCENTS WHO REPORT AT LEAST 60 MINUTES OF PHYSICAL ACTIVITY DAILY



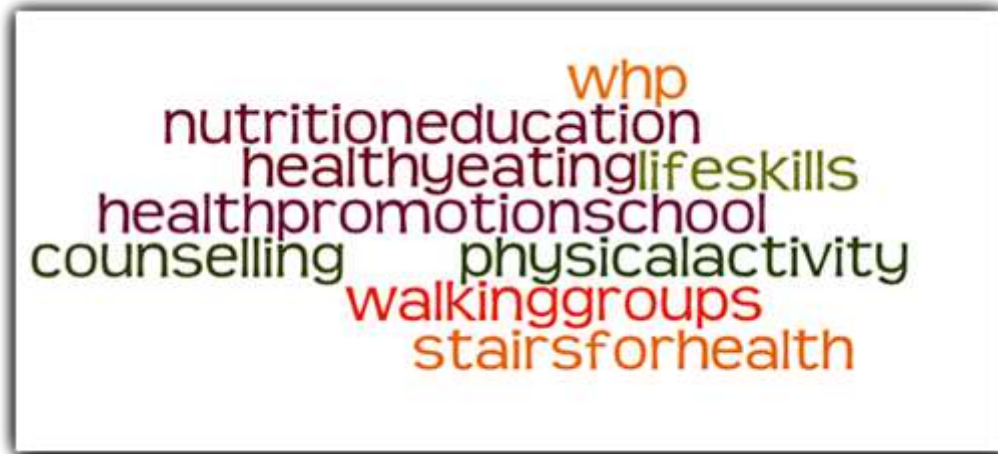
Source: Studio internazionale HBSC 2010 (Comportamenti legati alla salute in ragazzi in età scolare)
Ministero Salute, MIUR, Università degli studi di Torino, Regione Lombardia

3. PROMOTING HEALTHY LIFESTYLE AND SUPPORTIVE ENVIRONMENTS FOR HEALTH

World Health Organization defines lifestyle as “(...)a way of living based on identifiable patterns of behavior which are determined by the interplay between an individual's personal characteristics, social interactions, and socioeconomic and environmental living conditions. Individual lifestyles, characterized by identifiable patterns of behavior, can have a profound effect on an individual's health and on the health of others (...) If health is to be improved by enabling individuals to change their lifestyles, action must be directed not only at the individual but also at the social and living conditions which interact to produce and maintain these patterns of behavior”⁵.

This conceptual framework highlights the complexity involved in the process of changing behavior (individual and collective), which has to be taken into account to plan an effective and sustainable public health.

Thus, to sustain an active lifestyle educational, informative and communicative interventions are needed (individual empowerment), but at the same time it is necessary to act on environment determinants⁶ such as the urban structure of the city, social networks, opportunities to join promotion programmes / initiatives, etc..



⁵ "Lifestyle – lifestyles conducive to health" , Health Promotion Glossary - ©WHO 1998

⁶ That is, physical, organizational, social, economic communities dimension: rif. *The Ottawa Charter for Health Promotion*. 1986 WHO; John Calford "WHO is making a difference through health promotion", Oxford Journals Medicine - Health Promotion International Volume 14, Issue 1; Salute 2020 "Una politica di riferimento europea a sostegno di un'azione trasversale ai governi e alle società per la salute e il benessere" WHO Europe 2012

The "Toronto Charter for Physical Activity"⁷, a programming tool based on this process of advocacy⁸, in its supplementary document, "**Non-Communicable Diseases Prevention: Investments that Work for Physical Activity**", identifies and describes the seven best investments (sustainable and evidence-based actions) to increase the level of physical activity of the population which, if applied on a sufficient scale, can contribute significantly in reducing the burden of non-communicable diseases and in promoting the health of the population:

1. Programmes targeting the entire school community
2. Transport policies and systems that prioritise walking, cycling and public transport
3. Urban design regulations and infrastructure that provide for equitable and safe access for recreational physical activity, and recreational and transport-related walking and cycling across the life course
4. Physical activity and NCD prevention integrated into primary health care systems
5. Public education, including mass media, to raise awareness and change social norms on physical activity
6. Community-wide programmes involving multiple settings and sectors and that mobilize and integrate community engagement and resources
7. Sports systems and programmes that promote 'sport for all' and encourage participation across the life span.

Figure 12 – The Toronto Charter (presentation)

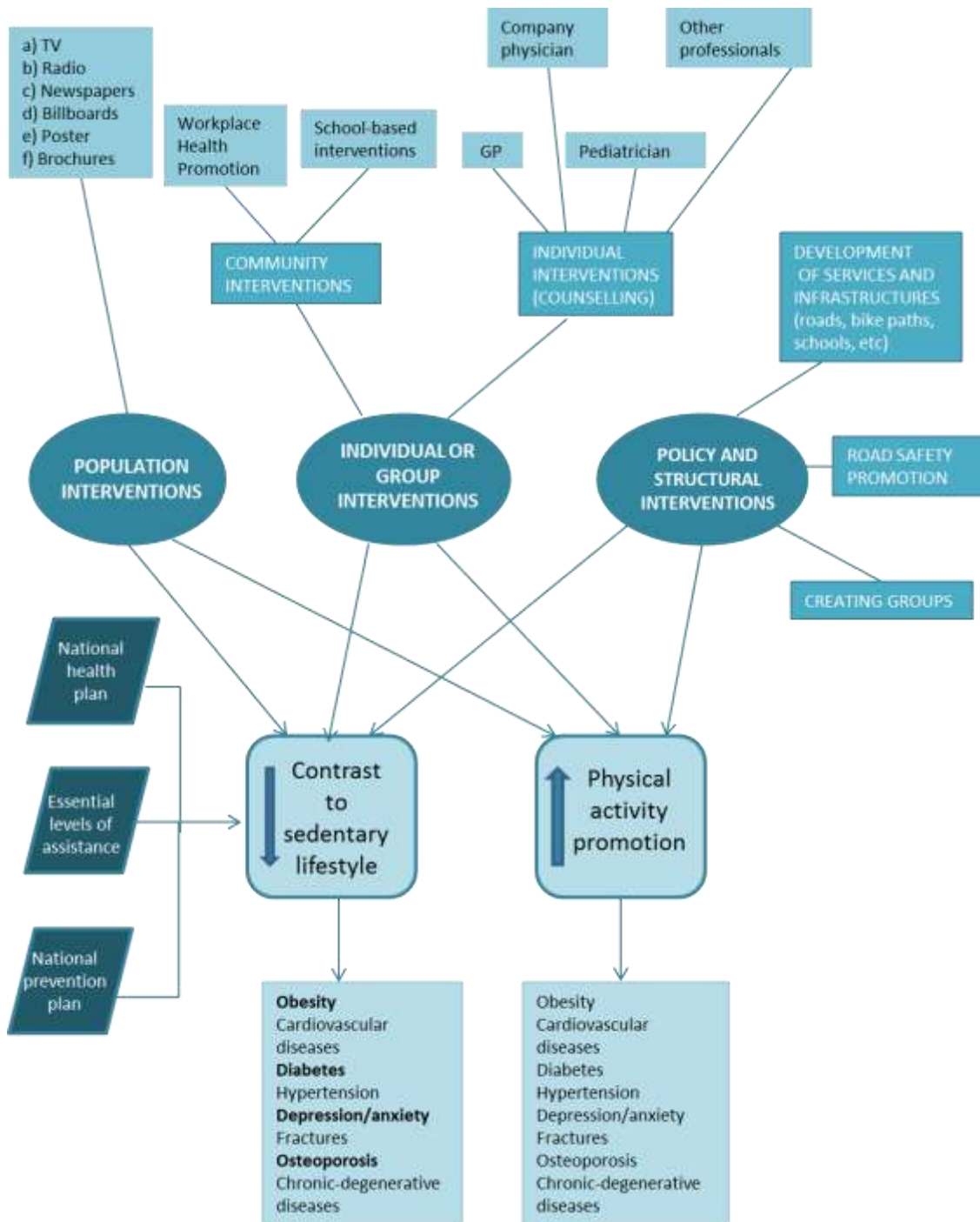


⁷ Global Advocacy for Physical Activity (GAPA) the Advocacy Council of the International Society for Physical Activity and Health (ISPAH). NCD Prevention: Investments that Work for Physical Activity. February 2011.
On line translation : http://www.dors.it/alleg/newfocus/201202/CarlaToronto_Investimenti_completa_web.pdf

⁸ "A combination of individual and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular health goal or programme". WHO Health Promotion Glossary, 1998

The structural/environmental interventions and intersectoral policies are conceptually integrated into a systemic programme of Public Health, as represented in Figure 13⁹.

Figure 13 - Logical scheme of analysis of the public health programme "Contrast to sedentary lifestyle and physical activity promotion"

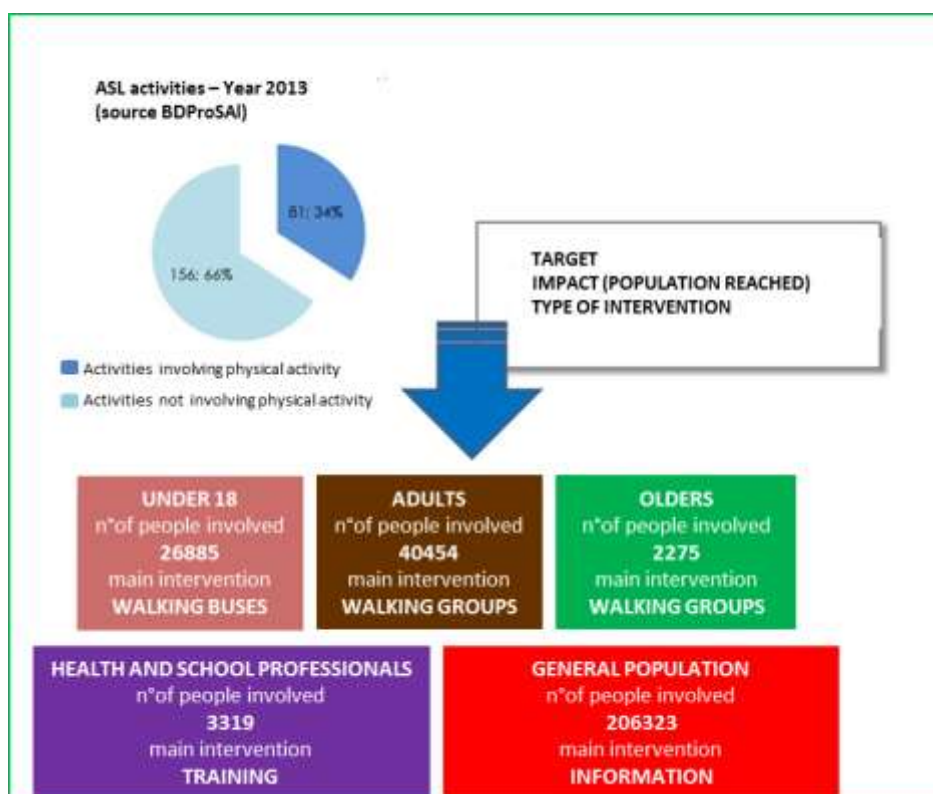


⁹ Cipriani F, Baldasseroni A, Franchi S. Lotta alla sedentarietà e promozione dell'attività fisica. Linea-Guida. SNLG, Novembre 2011.

4. PUBLIC HEALTH ACTIONS IN LOMBARDY

The Lombard Local Health Units (ASL, *Aziende Sanitarie Locali*) in their annual plan of interventions for health promotion (the Local Integrated Plan for Health Promotion) address in an integrated manner the promotion of physical activity and healthy eating as well as the other health or risk factors, such as smoking. The interventions are based on regional guidelines¹⁰ and oriented to appropriateness criteria such as effectiveness, integration, intersectorality¹¹ and sustainability¹². Currently, all over the region, interventions are developed included in network programmes (Workplace and school) and/or carried out with the involvement of local authorities, associations and other stakeholder of local communities, as described below (Figure 14).

Figure 14 - Lombard Local Health Units (ASL, *Aziende Sanitarie Locali*) activities in 2013.



Source BDProSal, Regione Lombardia

¹⁰ "Indirizzi alle ASL per la pianificazione integrata degli interventi di promozione della salute" DG Sanità 2009. <http://promozionesalute.regione.lombardia.it>

¹¹ "Intersectoral action for health is seen as central to the achievement of greater equity in health, especially where progress depends upon decisions and actions in other sectors, such as agriculture, education, and finance. A major goal in intersectoral action is to achieve greater awareness of the health consequences of policy decisions and organizational practice in different sectors, and through this, movement in the direction of healthy public policy and practice (...)"- Source: WHO Health Promotion Glossary, 1998.

¹² "Achieving the changes in risk factors and risk conditions that will result in health gain in populations requires the implementation of health promotion actions over years and decades. Attention needs to be given, therefore, to designing actions which have the potential for ongoing delivery and institutionalization after they have been evaluated and found to be effective. Health promoting policy, across a range of sectors, and modifying the physical environment in which people live have particular value because of their potential sustainability."- Source: WHO Health Promotion Glossary: new terms, 2006.

4.1 Health promoting schools Network in the Lombardy (Rete SPS Lombardia)

The Lombard Health Promoting Schools Network was born on the 14th of July 2011, when Lombardia Region and MIUR USR (Ministry of Education – Regional School Office) for Lombardy signed the Agreement "The Lombard Model of School Promoting Health", and became operational during the academic year 2012-2013 (192 Schools inclusive of about 190,000 students).

The Network schools undertook to be "environment conducive to health"¹³ through evidence-based actions, belonging to different areas: **Educational/Formative** (life skills, curricular thematic programmes, etc.), **Social** (listening, collaboration, participation, etc.), **Organizational** (canteens, snack vending machines, fruit snacks, walking buses and cycle paths from home to school and extracurricular physical activity, smoke-free environment, etc..) and collaboration with others in the local community (Associations, etc..).

This strategy ensures schools activation (empowerment), with the scientific support of local health authorities where necessary, in order to strengthen competence and awareness about our health in the entire school community (parents, students, teachers, janitors) and to create an environment where the adoption of healthy behaviors is easy and rooted in the everyday culture.

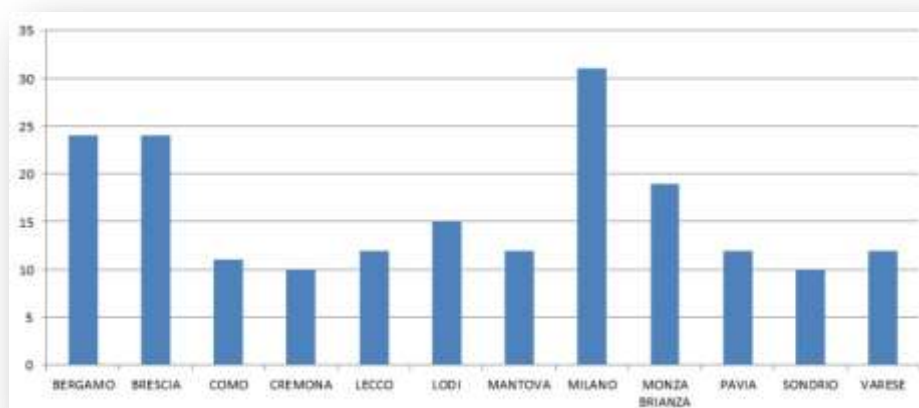
The methodological approach is provided by the health local unit to all the schools of the region.

The Lombard Network of health promoting schools is a member of the Schools for Health in Europe network <http://www.schools-for-health.eu/she-network>).

Figure 15 - Lombardia Health promoting schools Network website: <http://www.scuolapromuovesalute.it>



Figure 16 - N° of network schools per Province – Academic year 2012 - 2013



The workshop "Building the Network" took place in Iseo (Brescia). It was the first training initiative for Network School Directors leaders in Lombardy and it led to the release of a document entitled "Paper of Iseo" which contains the "minimal" and "common" operating elements of Network Schools considering some health determinants (healthy eating, physical activity promotion figure 17-, etc..).

Figure17 – Extract from “PAPER OF ISEO” – HEALTH PROMOTING SCHOOLS NETWORK: *Efficient actions promoting an active lifestyle at school, divided per area of health promoting school model*

AREA: DEVELOPING INDIVIDUAL SKILLS
<ul style="list-style-type: none"> • Provide theoretical / practical educational activities about physical activity benefits (arousing interest, developing knowledge and skills) and meetings or educational/training debates (in order to give the opportunity for dialogue and discussion with experts and peers) • Insert more physical activity promotion among extracurricular activities (starting of specific courses about easily feasible activities - for example about the discipline of the march, the fitwalking or the Nordic walking, the orienteering) • Provide training and support for teachers about data, benefits, methods and tools to facilitate physical activity promotion
AREA: QUALIFYING THE SOCIAL ENVIRONMENT
<ul style="list-style-type: none"> • Encourage the approach to sport through active and participatory testing of sport games (multisport day, mini-sports) • Create new opportunities for physical activities during school hours (i.e. using school breaks) and promote and develop opportunities for active play (team games, the rediscovery of traditional games) • Promote sports at school thanks to the experience of parents and volunteers active in this field
AREA: IMPROVING THE ORGANITATIONAL AND STRUCTURAL ENVIRONMENT
<ul style="list-style-type: none"> • Increase and enhance the physical education time (changing school day traditional structure, i.e. 1 hour of physical education five days out of five, involving children in choosing physical activities to be performed, suggesting non-traditional activities) • Provide and use safe routes from home to school that encourage active modes of transport (walking bus, bicycle usage) • Provide recognition (school credits) for students who participate in extracurricular physical activities for their efforts • Increase and enhance the physical education time (changing school day traditional structure, i.e. 1 hour of physical education five days out of five, involving children in choosing physical activities to be performed, suggesting non-traditional activities) • Provide and use safe routes from home to school that encourage active modes of transport (walking bus, bicycle usage) • Provide recognition (school credits) for students who participate in extracurricular physical activities for their efforts
AREA: STRENGTHENING COMMUNITY COLLABORATION
<ul style="list-style-type: none"> • Encouraging extracurricular physical activity (suggesting activities that can take place outside of the school environment alone, with friends or family, providing opportunities for physical activities / sports for free or at subsidized prices by exploiting school rooms (gymnasiums, yards) and / or through the community, sports club and local authorities involvement (rooms, facilities) • Organize projects, informative/training events to provide information and make conscious students, school staff, but also families and communities about physical activity importance and benefits • Understand and valorize the resources and initiatives of the local community in relation to the promotion of physical activity and sport • Participate in the design and care of the environment surrounding the school in order to make available and accessible areas and safe routes for playing, walking and cycling

4.2 Workplace Health Promotion - Lombardy WHP Network

The WHP Network was born in 2011 from the collaboration between Bergamo Health Local Unit and Enterprises Associations, Unions, Professional Groups, Scientific Societies and was recognized as "Best Practice" in a specific path carried out by the General Directorate for Health (DG Salute) and then turned on a regional scale with DGS Decree 11861 of 11.12.2012.

The WHP Network expanded on a regional scale during 2013 and today counts 200 companies (private, local health authorities, municipalities) recorded a total of about 85,000 workers involved. The Network is made up of companies ("Workplaces") which recognize the value of corporate social responsibility and undertake to be "environment conducive to health" systematizing, with the scientific support of Health Local Unit where necessary, actions (evidence-based) of different nature: informational (smoking cessation, healthy eating, etc.), organizational (canteens, snack vending machines, agreements with gyms, stairs health programmes, walking / biking from home to work, smoke-free environment, baby pit-stop, etc.) and collaboration with others in the local community (Associations, etc..).

The Lombardy WHP Network belongs to the European Network for Workplace Health Promotion ENWHP (<http://www.enwhp.org/the-enwhp/members-nco.html>).

Figure 18 – Lombardia WHP Network website <http://retewhplombardia.org/>



Figure 19 - Lombardia WHP Network Manual (Physical activity promotion area)

PHYSICAL ACTIVITY
Good practices

MANTIENITI IN FORMA!

Alcuni consigli per mantenersi in forma.

- Ridurre le porzioni
- Privilegiare cibi con pochi grassi
- Mangiare più frutta, verdura e cibi integrali
- Muoversi di più



Good Practice 3.4: an example of Physical Activity campaign.



FOR ACCREDITATION AT LEAST
3 GOOD-PRACTICES MUST BE IMPLEMENTED

3.1

The creation of **opportunities for physical exercise, accessible within the company to all employees**: five-a-side football field, volleyball court, tennis court, table Tennis, gym, jogging paths...

3.2

The **promotion of cycling to and from work** and the provision of a **covered bicycle parking area** as well as at least 2 of the following:

- Incentives and rewards** for employees using bikes (trouserslips and fluorescent arm bands, signalling devices for package arrivers, lights, wheel reflectors, helmets, vests or jackets etc.);
- Wall maps showing the safest cycle routes to get to work** from places in the surrounding areas;
- The provision of **information about cycling as a means of getting to work**: the advantages and safety rules (see attachment 3C).


3.3

Discounts or other facilities regarding the purchase of sportswear or sports equipment, enrolment at gyms, swimming-pools and sports centres.

18

Figure 20 - Lombardia WHP Network Manual (Physical activity promotion area)

PHYSICAL ACTIVITY
Good practices



3.4

In-house information campaign concerning the Promotion of Physical activity and which includes:

- Posters beside lifts encouraging the use of the stairs (see attachment 34 for useful material);
- Promotional posters (at least 1 forevery 70 employees);
- Messages in pay packets (at least 3 a year) and/or messages on canteen table mats (for at least 3 months a year). See attachment 38 for useful material

3.5

In-house sports activities (tournaments, non-competitive runs/walks, bicycle rides and so on) at least twice a year.


3.6

A **corporate walking group**, meeting at least once a week all year round with the participation of at least 10% of all staff, and with a leader trained (free) by ASL.

3.7

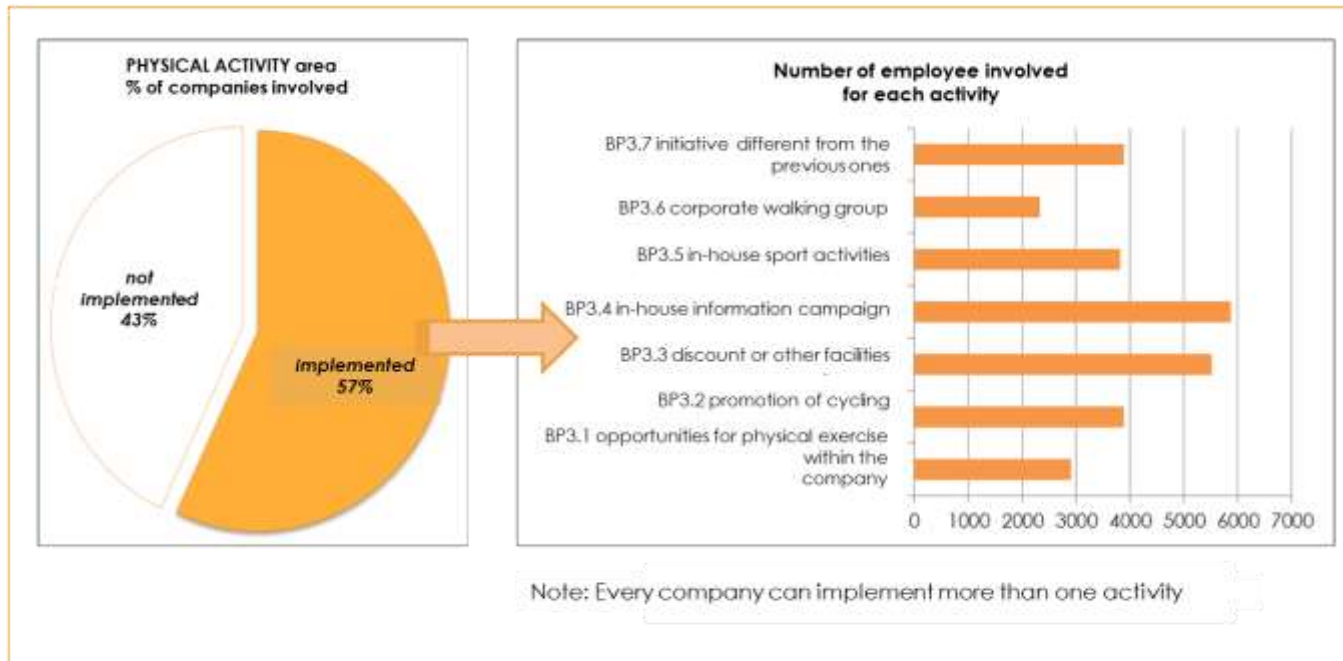
An initiative proposed by the company but which is different from the previous ones, approved by WHP staff with evaluation of the achieved results.

LE SCALE FANNO BENE AL CUORE



Good Practice 3.4 an example of Physical Activity Campaign

Figure 21 - Lombardia WHP Network Companies that started recommended actions for physical activity promotion: actions type and number of employees involved for each activity



Source: database regionale WHP Lombardia – Anno 2013

4.3 Walking groups

The "walking groups" are groups of people who regularly meet to walk together. Initially led by operators and then gradually self-made through the formation of "walking leaders" identified among volunteers.

In March 2014, DG Salute has carried out a survey which took a picture of the development of this initiative, which has been activated by all the 15 local health authorities, through a participatory process with the involvement and activation of municipalities and associations. Farther walking groups arise also by actions undertaken by Network members (WHP, Health promoting schools Network, healthy cities, etc.).

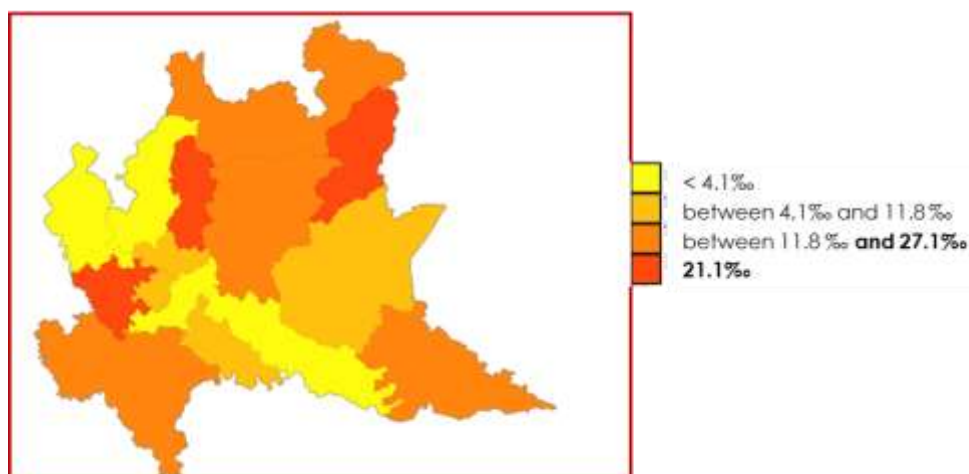
The number of walking groups' participants is 18,891 (Table 5), of which 11,488 are over 65 years old (61%).

Table 5 – Walking groups in Lombardy (updated March 2014)

ASL	Total number participants	Participants over 65	Population rate ‰ aged 65-74aa	Number of municipalities involved	% municipalities with walking groups
Bergamo	4475	2000	18 ‰	93	38 %
Brescia	890	478	4 ‰	32	20 %
Como	195	150	2 ‰	10	6 %
Cremona	173	130	3 ‰	5	4 %
Lecco	2615	1085	30 ‰	48	53 %
Lodi	180	120	5 ‰	7	11 %
Mantova	1316	987	22 ‰	33	47 %
Milano	1105	911	5 ‰	4	57 %
Milano 1	3620	3000	30 ‰	52	71 %
Milano 2	520	100	2 ‰	14	26 %
Monza and Brianza	400	400	4 ‰	11	20 %
Pavia	2260	1350	22 ‰	84	44 %
Sondrio	452	227	12 ‰	14	18 %
Varese	374	250	3 ‰	8	6 %
Valle Camonica S.	316	300	27 ‰	9	21 %
Lombardy	18891	11488	11 ‰	424	27 %

Source: Regional survey, March 2014

Figure 22 – Map of the population rate reached by walking groups in the population aged 65–74



Source: Regional survey, March 2014

Walking groups in Lombardy are currently organized into approximately 516 "routes", that are groups of people who walk on different paths and / or at different times. 31% of these routes consist

of at least 20 people, while 69% of the lines consist of more than 20 people. Since 2009 the Health Local Health Units trained around 1,019 walking leaders and most of them prepared a training/updating manual for that role. (Table 6)

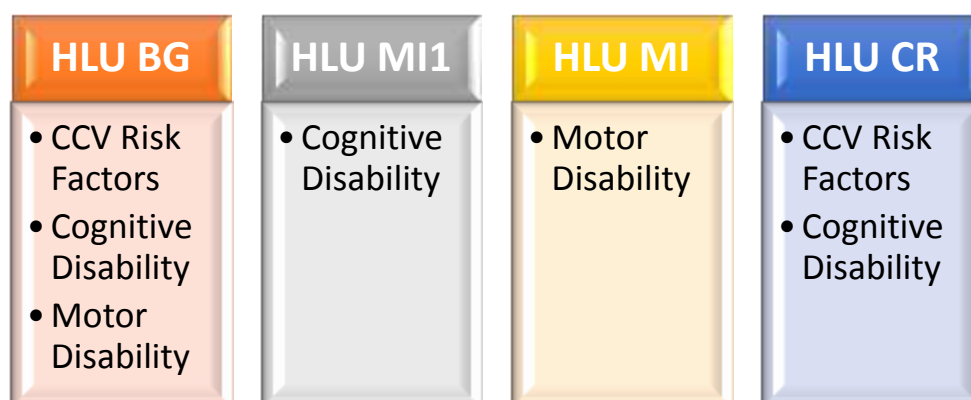
Table 6 – Trained walking leader and walking groups lines

ASL	Trained walking leader (2009 - 2013)	LINES		
		number	With <20 («walkers»)	With > 20 («walkers»)
Bergamo	n.d.	93	n.d.	n.d.
Brescia	39	46	26	20
Como	20	10	3	7
Cremona	11	11	9	2
Lecco	159	57	6	51
Lodi	3	8	1	7
Mantova	n.d.	40	10	30
Milano	33	19	1	18
Milano 1	371	104	20	84
Milano 2	184	32	0	32
Monza and Brianza	90	12	5	7
Pavia	50	127	50	77
Sondrio	35	14	3	11
Varese	15	27	27	0
Valle Camonica S.	9	9	1	8
Lombardy	1019	516	162	354

Source: Regional survey, March 2014

In some areas of Lombardy walking groups offer is also addressed to target with specific problems of medical nature (Figure 23) and hospitals, social care, GPs can be directly involved in the programme. Further, the 2014 survey showed a new experience (Pavia Health Local Unit), providing the activation of parents walking group as part of the activities in the school setting (Figure 24).

Figure 23 - Health Local Unit (HLU) that started walking groups addressed to target with specific medical problems.



Source: Regional Survey, March 2014

Figure 24 – Picture of Walking groups meeting in Lecco area - ASL Lecco



Figure 25 - Playbill promoting walking groups led by parents - ASL Pavia

Regione Lombardia
ASL Pavia

Le Mamme..... del futuro
..... Uno stile di vita sano.....
IL CAMMINO!

Oltre al piedibus 
anche noi mamme camminiamo!

*Se vuoi avere una marcia in più, ...
..vieni a camminare con noi!*

**Lunedì, Martedì, Giovedì ore 14.30
Mercoledì e Venerdì ore 8.45
Davanti Scuole Elementari - Mortara**

La vita è un cammino, camminare è vita

Per ulteriori informazioni: www.asl.pavia.it
Gruppi di Cammino Territorio Lomellina

E-mail: nadiadenughes@hotmail.it

Figure 26 – Walking groups playbill – ASL Bergamo



Figure 28 - Over 65 walking groups: playbill - ASL Monza Brianza



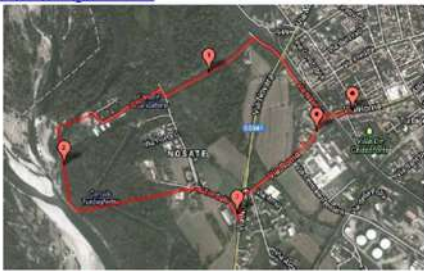



Figure 27 – Walking groups playbill – ASL Bergamo



Figure 29 - Playbill concerning walking groups net development - ASL Milano 1



Figure 30 - ASL Milano 1 walking groups: factsheet on "Ponte Tibetano" pathway - Turbigo www.aslmi1.mi.it/attivita-fisica/mappegdc

<p style="text-align: center;">Percorso del "PONTE TIBETANO" Turbigo</p> <p>Partenza da Via Roma 39 Orario di partenza ore 9.00 Tempo 50 minuti Km 3.6 Walking Leader: Sig. Re Giorgio cell: 3311006372 Mail: re.giorgio2@gmail.com</p>    <p>Punti di interesse: Il Ponte Tibetano Alla fine del 2008 è stato aperto al pubblico in località <i>Tre Salti</i> un <i>Ponte Tibetano</i> di 100 m di lunghezza che scavalcando lo scaricatore del Canale Industriale consente un comodo collegamento di questa località direttamente con il Ponte di Turbigo seguendo il bel sentiero El bis che costeggia in gran parte il fiume.</p>	<p>Il Ponte Tibetano, realizzato su cavi, è lungo settanta metri, sospeso a otto metri dall'acqua, e si può percorrere anche con bici alla mano. Attraversato il ponte imboccare il sentiero subito a destra. Il percorso si addentra in un bosco che costeggia il Ticino, ripiegando a sinistra ci si rituffa nella vegetazione. Si attraversa un ponticello sul canale Turbighetto e si continua, fino ad un cancello di ferro che divide il bosco dalla strada Tre Salti che riporta sulla Via Novara</p> <p>I Tre Salti</p>  <p>Nella parte terminale del Canale Scaricatore I° di Turbigo che si origina sulla riva opposta del Naviglio Grande sul retro della Centrale Idroelettrica Castelli (serve per regolare la portata del Naviglio Grande scaricando l'acqua in eccesso), il corso d'acqua avanza per un 100 mt circa per gettarsi nel Fiume Ticino creando 3 salti poco a monte alla foce, il grande manufatto dei 3 salti in calcestruzzo serve per rallentare l'impetere della forte corrente.</p>
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Walking groups and "health gain"

Health gain calculation in the short term (inside healthy lifestyles promotion programme) must rely on statistical models that can show how reducing one or more risk conditions may prevent death or adverse event in health.

WHO has developed one of these models: HEAT (an online resource: <http://www.heatwalkingcycling.org>) allows to estimate the reduction in mortality following a regular activity cycling and /or walking. It is based on the best available evidence, with parameters that can be tailored to suit specific situations (the default parameters are valid for the European context). Estimating a period of walking average of 120 minutes per week at a slow pace (two walks of 1 hour for 4.8 km / h) for participants to Lombardy walking groups (18,891 people), HEAT calculates that the activity may decrease the risk of mortality of 14% in walking groups participants compared to a sedentary population (limit: HEAT allows to estimate the impact in age range of 18-70 years, thus excluding those over 70 who are present in walking groups).

The decrease in risk cannot be related to the individual but it is a good representation of the actual health gain activity.

Figure 31 - Walking groups playbill - ASL Milano

Figure 32 - Walking groups playbill - ASL Milano 2

Figure 33 -Walking groups playbill - ASL Lodi

Figure 34 - Guidelines for activation of walking groups- ASL Lodi

Figure 35 - Walking groups playbill – ASL Sondrio

I GRUPPI di CAMMINO

Città	Quando iniziano	Punto di ritrovo	Giorni successivi	Telefoni Asl per informazioni
Chiavenna	24 settembre 2013 ore 15,00	Paraggio di Pravigliano	Mercoledì e Giovedì	0243 67 336
Inverigo Medusa	14 settembre 2013 ore 15,00	Paraggio San Vito (Peralino scaldasole)	Lunedì e Venerdì	0243 67 336
Manifattò	16 settembre 2013 ore 14,30	Piazza 19 Novembre	Lunedì e Giovedì	0242 943 271
Orsino	10 settembre 2013 ore 15,00	Piazza chiesa Pavesello	Mercoledì e Venerdì	0242 943 271
Orsino	16 settembre 2013 ore 14,30	Piazza Santa Domenica	Lunedì e Giovedì	0242 943 271
Trosceno	16 settembre 2013 ore 14,30	Via Valente - paraggio Castelletto	Lunedì e Giovedì	0242 943 271
Costo V.	1 ottobre 2013 ore 14,30	Piazza S. Ambrogio	Mercoledì e Giovedì	0242 943 271
Morbegno	13 settembre 2013 ore 14,30	Paraggio del sito	Lunedì e Venerdì	0242 943 271
Orsino	16 settembre 2013 ore 15,00	Scuola media Achilleo	Lunedì e Giovedì	0242 943 271
Sondrio	16 settembre 2013 ore 15,30	Largo Sordani per piazza antistante la Caserma dei Vigili del Fuoco	Venerdì e Venerdì	0242 955 419
Chiara V.	27 settembre 2013 ore 14,30	Centro Sportivo Invernali	Mercoledì e Venerdì	0242 955 419
Tirano	12 settembre 2013 ore 15,00	Piazza Marconi	Lunedì e Giovedì	0242 707 337
Sonico	20 agosto 2013 ore 15,00	Paraggio	Lunedì e Giovedì	0242 959 128
Vallerdara	3 settembre 2013 ore 15,00	Centro Sportivo Invernali	Mercoledì e Giovedì	0242 959 128

Cos'è?
 È un gruppo di persone che si ritrova in giorni e luoghi definiti per camminare insieme allo scopo di incrementare il movimento e favorire la salute e il benessere. Camminare diventa anche un'occasione per conoscere altre persone e favorire la socializzazione. Il gruppo è guidato da volontari che stabiliscono di volta in volta le persone delle camminate.

A chi è rivolto?
 La partecipazione al gruppo di cammino è aperta a tutti, ma l'invito è rivolto soprattutto a coloro che sono sedentari perché sono il più a rischio di sviluppare le malattie.
 Un'attività fisica regolare e protratta con continuità aiuta, infatti, a:
 - mantenere ottimale il livello di colesterolemia, di glicemia e di pressione arteriosa
 - tenere sotto controllo il proprio peso
 - rinforzare muscoli, ossa ed articolazioni
 - migliorare il tono dell'animo.

Come?
 La partecipazione è libera e gratuita. La durata dell'uscita sarà in totale di 60-80 minuti. Camminare è un'attività alla portata di tutti: occorrono soltanto un abbigliamento idoneo e un paio di scarpe comode.

Perché?
 Camminare aiuta a tenere sotto controllo e a prevenire molte malattie (diabete, ipertensione, osteoporosi, malattie cardiovascolari, alcuni tumori). Camminare fa STARE bene, ma soprattutto fa SENTIRE bene. Farlo insieme ad altre persone è anche divertente.

Mettili in moto la...SALUTE

Figure 36 - Walking groups playbill – ASL Milano 2

CONSIGLI PER IL CAMMINATORE

Complimenti per la scelta che avete fatto di dedicare parte del vostro tempo all'attività del cammino di gruppo: ne trarrete sicuramente giovamento. Camminare all'aria aperta in compagnia comporta notevoli vantaggi per il fisico e per lo spirito!
 Questa attività è adatta a chiunque e non presenta controindicazioni particolari. Tuttavia prima di iniziare il programma di cammino è opportuno fornire qualche suggerimento per migliorare la consapevolezza e la sicurezza dei partecipanti.

- Consultare il proprio medico di fiducia per avere consiglio specialmente in caso di prolungata inattività o di problemi di salute
- Affrontare l'attività del cammino con molta gradualità (non bisogna mai arrivare a sentirsi troppo affaticati) e con realismo riguardo alle proprie abilità e livelli di efficienza fisica. Può giovare camminare accanto a chi ha lo stesso passo, specie per chi è meno in forma e ha bisogno di fare delle pause di riposo.
- Attendere almeno 45 minuti dopo un pasto prima di cominciare l'attività fisica e rinunciare se si accusa un eventuale malessere
- Tenere conto dell'ambiente in cui si svolge la passeggiata, facendo attenzione alle strade trafficate, agli altri camminatori, ai ciclisti, alle condizioni del suolo ecc. Sui passaggi commerciali prestare attenzione agli addetti delle pulizie, alle pavimentazioni scivolose, ecc.
- Comunicare al capo passeggiata l'intenzione di fare una sosta o di ritirarsi prima della conclusione oppure in caso di disturbi o malessere nel qual caso è sempre bene sospendere l'esercitazione
- Portare con sé una bottiglietta d'acqua e, se si soffre di diabete, un succo di frutta o dello zucchero (per eventuale ipoglicemia)
- Bere acqua quando si cammina nella stagione calda e proteggersi dal sole con indumenti appropriati, cappello e filtro solare

BUONA CAMMINATA!

4.4 Walking buses

Walking bus project develops within community programmes with the activation of local governments, who are committed to support the development of best practices and effective action on its area (in collaboration with local schools, associations, etc.) in order to create conditions and opportunities that facilitate healthy lifestyles to their citizens (cycle paths, pedestrian areas, healthy menu choices in public canteens, etc.).

Walking bus consist in the organization of safe pedestrian pathways from home to school that were normally traveled by bus or by car.

Children go to school on foot, accompanied by adult volunteers and along a predetermined route with stops.

In March 2014, DG Salute has carried out a survey which photographed the development of this project, which is present on all 15 Lombardy Health Local Units.

The municipalities that have activated the Walking bus are 341 that corresponds to the 22% of Lombardy municipalities. 57 % of children between the age of 6 and 10 years who live in Lombardy go to school by the walking bus.

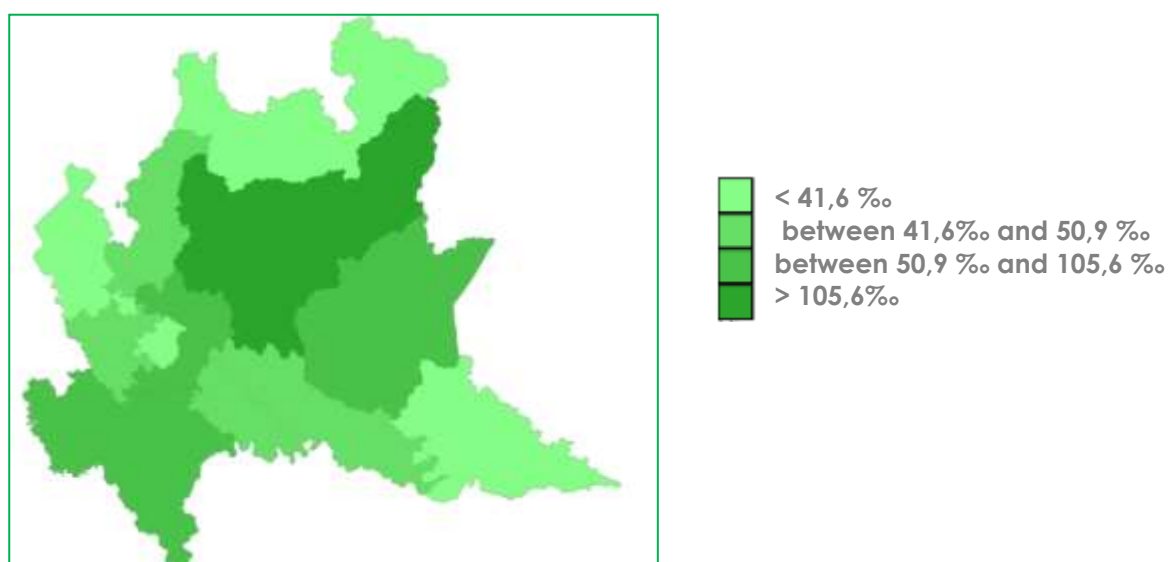
The number of schools involved is 501: about 21% of Lombardy primary schools provide the walking bus service.

Table 6 – Walking buses in Lombardy: data per Local Health Unit (ASL)

ASL	n° of children involved	Rate ‰	n° of School	% School	n° of Municipalities	% Municipalities
Bergamo	6033	106	104	32	84	34 %
Brescia	4863	83	70	26	54	33 %
Como	1166	42	28	15	17	10 %
Cremona	766	48	17	16	13	11 %
Lecco	3110	191	55	50	40	44 %
Lodi	480	43	5	7	5	8 %
Mantova	445	24	19	17	11	16 %
Milano	602	9	25	10	1	14 %
Milano 1	2159	48	45	25	25	34 %
Milano 2	1624	51	31	27	22	42 %
Monza e Brianza	2227	54	40	24	23	42 %
Pavia	1350	59	19	12	15	8 %
Sondrio	257	31	9	12	5	6 %
Varese	800	19	18	31	13	9 %
Valle Camonica Sebino	747	160	16	7	13	31 %
Lombardia	26629	57 ‰	501	21 %	341	22 %

Source: Regional survey, March 2014

Figure 37 – Map of the population rate involved in walking buses in the population aged 6-10



Source: Survey regionale, marzo 2014

Figure 38 – Walking buses in Livigno - ASL Sondrio



Figure 39 - Picture of walking buses in Lecco, published in 2009 on New York Times (http://www.nytimes.com/2009/03/27/world/europe/27bus.html?_r=0)

The New York Times

Students Give Up Wheels for Their Own Two Feet



Cave Yotter for The N

Gianfranco Frizzera, a volunteer in a program aimed at reducing vehicle emissions, walked children to school through a cemetery in Lecco, Italy.

By **ELISABETH ROSENTHAL**
Published: March 20, 2009

LECCO, Italy — Each morning, about 450 students travel along 17 school bus routes to 10 elementary schools in this lakeside city at the southern tip of Lake Como. There are zero school buses.

4.5 Stairs for Health

The project called "Stairs for health"¹⁵ has spread throughout the region (within the WHP programme and other community programmes). The promotion of stairs use is one of the most simply and effective community interventions in counteracting the sedentary lifestyle and increasing physical activity; systematic reviews of the literature¹⁶ have shown that the use of written warnings about replacing elevator or escalator with stairs, placed at strategic points, push people to be more active.

The intervention was effective in many different situations: department stores, train stations, university libraries, banks, offices; and in different population groups: men and women, young and old people, normal weight and obese people.

The recommended intervention^{17,18}, consist in exposing next to the point where you have to choose whether to make the pathway on foot or by the elevator posters / banners / placards / etc. that encourage people to use the stairs, illustrating health benefits of physical activity and stressing that this simple choice could represent a very easy opportunity to make more active our lifestyle (if stairs are far from the elevator, point the warning next to the elevator push button).

Published studies have been consistent in detecting a change in behavior immediately after the intervention, but a prolonged observation has shown an attenuation of the effect: for this reason it is useful providing periodic recall actions / reinforcement (i.e. communications on the company website, contests of ideas among employees for the production of promotional images, press conferences, etc..).

Figura 40 - Communication campaign "Stairs for Health" ASL Brescia



15 Source: Regione Lombardia "Informational Schedule about the promotion of physical activity programmes thorough the call "use the stairs in replacement of the lift" powered by U.O. Governo della Prevenzione e Tutela Sanitaria – January 2010

16 Task Force on Community Preventive Services Recommendations to increase physical activity in communities Am J Prev Med 2002 May;22 (4 Suppl):67 <http://www.ncbi.nlm.nih.gov/books/NBK14100/>

17 Public Health Agency of Canada Stairway to Health http://www.phac-aspc.gc.ca/sth_evs/english/index-eng.php Physical Activity <http://www.phac-aspc.gc.ca/pau-uap/fitness/work>

18 CDC (Atlanta) - Healthier Worksite Initiative: StairWELL to Better Health <http://www.cdc.gov/nccdphp/dnpao/hwi/toolkits/stairwell/index.htm>

Figura 41 - Communication campaign "Stairs for Health" ASL Mantova



Among the experiences of communities not spread throughout the entire region, it should be noted the initiative "Health Pills - Free Trials of movement" made by "GIRETTO- Social Promotion Association" on the territory of the Health Local Unit of Lecco. This project consists in the proposal of free physical activity hours, offered by sports clubs and recreational groups, to people usually not involved or related to physical activity. The initiative started in 2012 with the support of Lecco Province (Department of Sport, Federfarma, ACEL, provincial section of CONI, with the collaboration of recreational associations, sports clubs, non-profit organization Association of Lecco Young Diabetics, Lecco Hypertensive Association, the Italian Union for the Blind) and the technical and scientific support of Lecco Health Local Unit.

Using a social marketing method, the initiative adopted as a communication tool / supply, a box called "health pills" since it has the shape of a drug box (10,000 copies distributed in all the pharmacies of the province) that contains:

- The "leaflet" prepared by the Health Local Unit showing the medical and scientific information that demonstrates the health benefits derived from an active lifestyle;
- 35 coupons for free access to sports facilities, gyms, classes, pools
- a list of all the sport clubs participating in the initiative explaining what kind of sport experience they can offer.

The distribution in pharmacies was completed in December 2012, but the project continues on <http://www.pilloledisolute.giretto.it>, a website where citizens can keep up to date about sport club participating to the initiative and can download free coupons.

4.6 The European Innovation partnership on Active and Healthy Ageing

The European Commission, within the overall Innovation Union strategy¹⁴, has identified "active and healthy ageing" as a major societal challenge common to all European countries, and an area which presents considerable potential for Europe to lead the world in providing innovative responses to this challenge.

Started in November 2011, the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA)¹⁵ has the goal to pursue a triple win for Europe:

1. enabling EU citizens to lead healthy, active and independent lives while ageing;
2. improving the sustainability and efficiency of social and health care systems;

¹⁴ http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/flagship-initiatives/index_en.htm

¹⁵ http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing

3. boosting and improving the competitiveness of the markets for innovative products and services, responding to the ageing challenge at both EU and global level, thus creating new opportunities for businesses.

This will be realised in the three areas of prevention and health promotion, care and cure, and active and independent living of elderly people. The overarching target of this partnership will be to increase the average healthy lifespan by two years by 2020.

The Partnership aims to achieve this by bringing together key stakeholders (end users, public authorities, industry); all actors in the innovation cycle, from research to adoption (adaptation), along with those engaged in standardisation and regulation. The partnership provides these actors with a forum in which they can cooperate, united around a common vision that values older people and their contribution to society, identify and overcome potential innovations barriers and mobilise instruments.

Furthermore six action groups have been identified for specific areas of intervention:

1. Prescription and adherence to treatment
2. Personalized health management, starting with a Falls Prevention Initiative
3. Prevention and early diagnosis of frailty and functional decline, both physical and cognitive, in older people
4. Replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional levels
5. Development of interoperable independent living solutions, including guidelines for business models
6. Innovation for Age-friendly buildings, cities & environments.

The Partnership aims at improving the framework conditions for uptake of innovation, leveraging financing and investments in innovation and improve coordination and coherence between funding for research and innovation at European, national and regional level in Europe.

Lombardy joined the EIP-AHA in February 2013 providing its commitment focused on the "Innovation for Age-friendly buildings, cities & environments" area and targeted on the health promotion in Lombardy local communities (cities) in terms of success factors for healthy ageing. Lombardy participation to the EIP-AHA has the twofold objective to support the governance role of the region and its healthcare system by sharing, at European level, notable and effective experiences already implemented on the territory addressing health promotion and prevention, and to enhance the coherence of the regional strategies on these areas of intervention with the priorities identified at European and International level (WHO). In this light, the EIP-AHA represents a unique platform to foster the participation of the regional health system stakeholders – namely the Local Health Units and professionals – to a transnational initiative enabling mutual learning and the set-up of new alliances with reference networks.

More specifically, the Walking groups programme has been offered at the attention of the EIP-AHA initiative as a good practice deployed across the whole regional territory and implemented, under the coordination of the regional government, through the complementary contribution of different players such as the Local Health Units, professionals, citizens and municipalities. More information on Lombardy Walking groups programme and other European practices can be found on the first edition of the compilation of good practices report issued in the framework of the EIP-AHA¹⁶.

¹⁶ http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=documents

Figura 42 – Cover page of the first edition publication “A Compilation of Good Practice”



”

**Promotion of physical activity
and contrast to sedentary lifestyle:
public health programmes in Lombardia**

Report May 2014

<http://www.promozionesalute.regione.lombardia.it>

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