



HEPA Europe  
European network for the promotion  
of health-enhancing physical activity

## **Des bienfaits du mouvement pour la santé jusqu'à la promotion de l'activité physique - approches et expériences internationaux**

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*4ème workshop de la Société Marocaine d'Athérosclérose, Casablanca, 08.12.2007*

## **Évidence scientifique en santé publique**

### **Évidence de Type I**

Maladie ← facteur de risque (p. ex. inactivité physique)

*“Pourquoi faut-il faire quelque chose?”*

### **Évidence de Type II**

Intervention → distribution du facteur de risque

*“Qu'est-ce qu'il faut faire?”*

Cavill et al 2005, adapted from Brownson et al 1999

## De l'observation individuelle aux études de cohortes The Harvard Alumni Health Study

Participants

- **Harvard University « freshmen » 1916-1950 (16'936 hommes)**

Mesure des variables d'intérêt (activité physique)

- **Questionnaires en 1962 ou 1966**
- **Questionnaires en 1977**
- **Questionnaires en 1988**

Mesure des effets

- **Enregistrement continu des décès depuis 1962 ou 1966 (1'413 décès)**

## De l'observation individuelle aux études de cohortes The Harvard Alumni Health Study

Résultats 1986

Physical activity 1962/66 [kcal per week]	Relative risk of death
<2000	1.00
>=2000	0.72

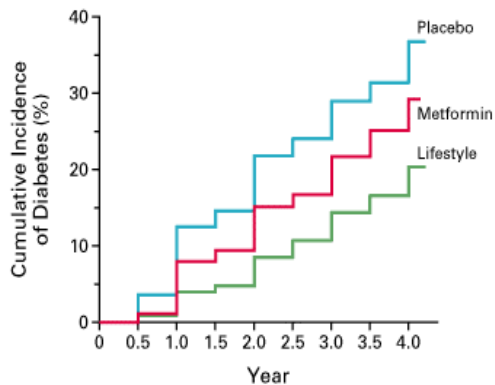
## De l'observation individuelle aux études de cohortes The Harvard Alumni Health Study

Résultats 1986

Physical activity 1962/66 [kcal per week]	Relative risk of death
<500	1.00
500-999	0.78
1000-1499	0.73
1500-1999	0.63
2000-2499	0.62
2500-2999	0.52
3000-3499	0.46
>=3500	0.62

*N Engl J Med 1986; 314: 605-13*

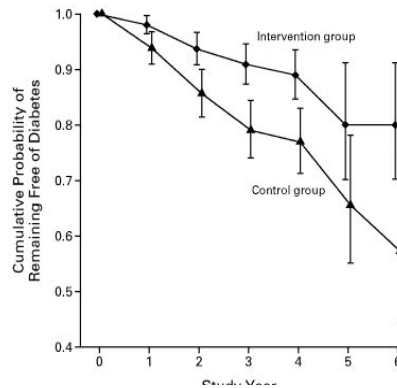
## Des études de cohortes aux études contrôlées randomisées Réduction de l'incidence du diabète de type 2 Intervention «Style de vie» versus Metformin



*Diabetes Prevention Program Research Group.  
N Engl J Med 2002; 346 (6): 393-403*

## Des études de cohortes aux études contrôllées randomisées

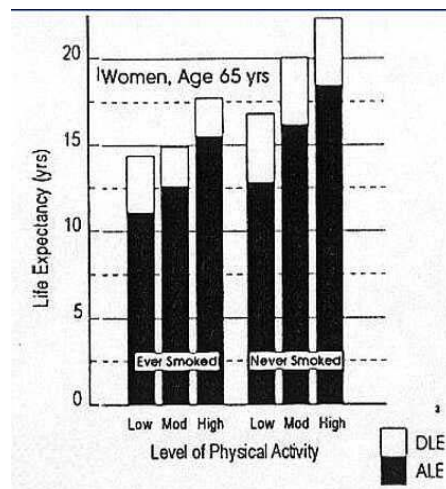
### Prévention du diabète de type 2 chez des personnes avec une tolérance glycémique diminuée par une intervention sur les habitudes de vie



*Tuomilehto J et al. N Engl J Med  
2001; 344 (18): 1343-1350*

## Des MCV aux effets multidimensionnels

### Espérance de vie active et avec une limitation fonctionnelle selon le niveau d'activité physique

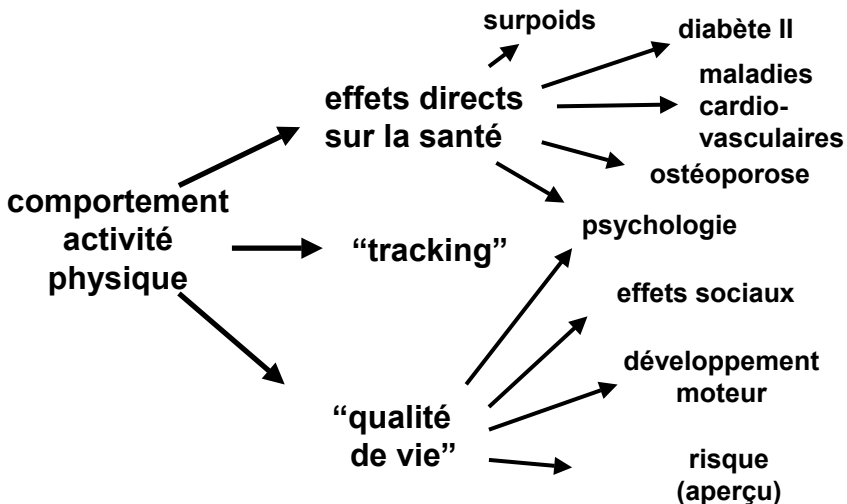


*Ferrucci L et al.  
Smoking, physical activity, and active life expectancy. Am J Epidemiol 1999; 14: 645-653*

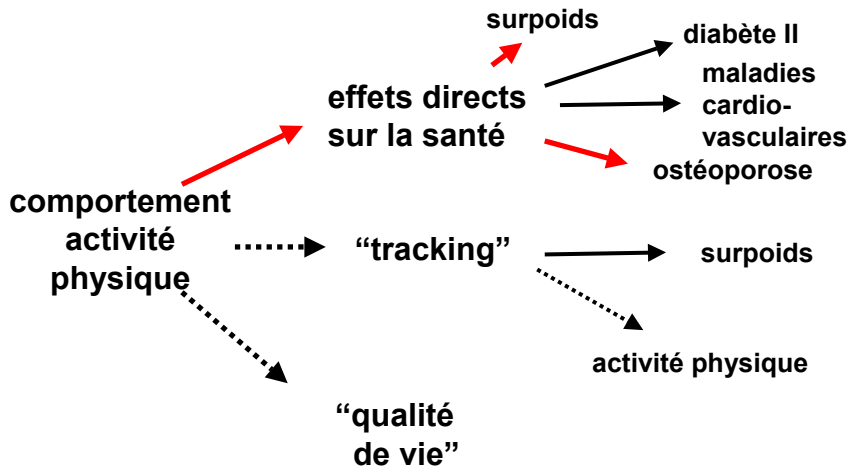
## Activité physique et santé chez l'adulte – effets établis

↑	<b>espérance de vie</b>	↓	<b>ostéoporose</b>
↓	<b>maladies cardiovasculaires</b>	↑	<b>autonomie dans l'âge avancé</b>
↓	<b>surpoids</b>	↓	<b>dépression</b>
↓	<b>diabète II</b>	↑	<b>tolérance du stress</b>
↓	<b>calculs biliaires</b>		
↓	<b>cancer du colon</b>		
↓	<b>(cancer du sein)</b>		
↓	<b>(cancer de la prostate)</b>		
↓	<b>(cancer du pancréas)</b>		
			<b>Recherche actuelle:</b>
			<b>? Performance cognitive</b>

## Activité physique et santé chez l'enfant – effets plausibles



## Activité physique et santé chez l'enfant – effets établis



WHO/UNECE. Transnational Project and Workshop Series Transport-Related Health Effects with a Particular Focus on Children. Topic Report Physical Activity. 2004.

## Pourquoi l'évidence chez les enfants est-elle (encore) plus faible que pour les adultes?

- L'inactivité physique cause des maladies chroniques et pas des maladies aiguës
- Le "tracking" de l'activité physique est faible (avec avantages et désavantages)
- Difficultés méthodologiques pour des effets complexes (p. ex. développement moteur)
- Standardisation des mesures de l'activité physique reste un défi

## Accumulation des facteurs de risque cv et activité physique chez les enfants

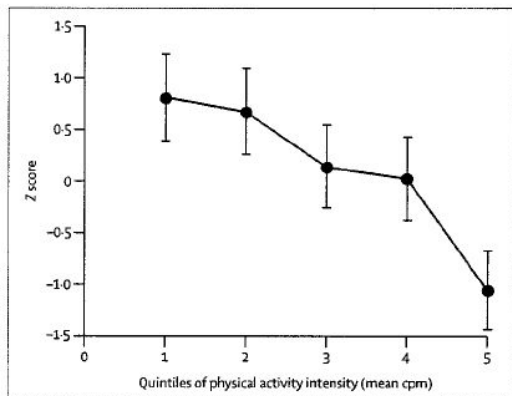
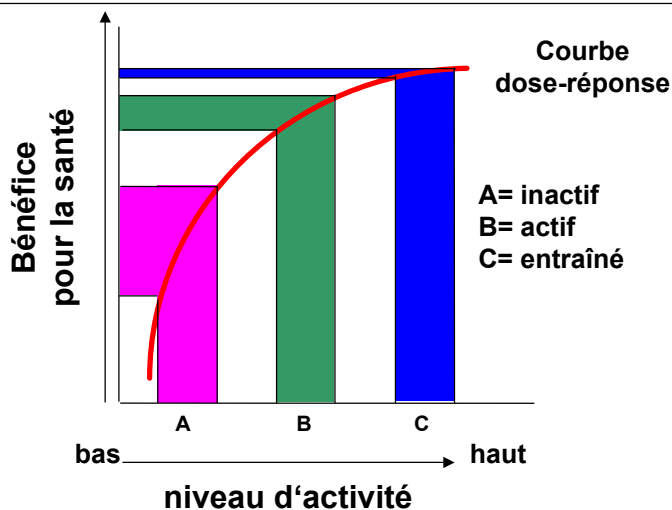


Figure 1: Mean Z score in every quintile of average physical activity intensity  
Vertical bars=95% CI.

Mean Z score included systolic blood pressure, triglyceride, total cholesterol/HDL ratio, insulin resistance, sum of four skinfolds, and aerobic fitness.

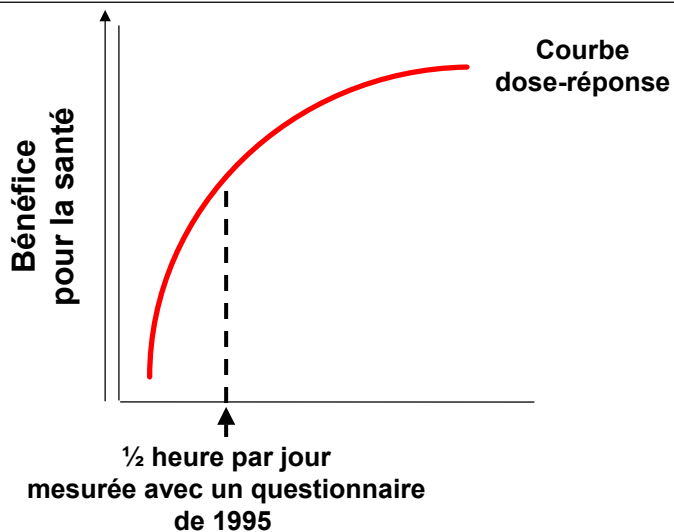
Andersen LB, Harro M, Sardinha LB, Froberg K, Ekelund U, Brage S, Anderssen SA. Physical activity and clustered cardiovascular risk in children: a cross-sectional study (The European Youth Heart Study). *Lancet* 2006;368(9532): 299-304

## Volume d'activité physique et effets sur la santé



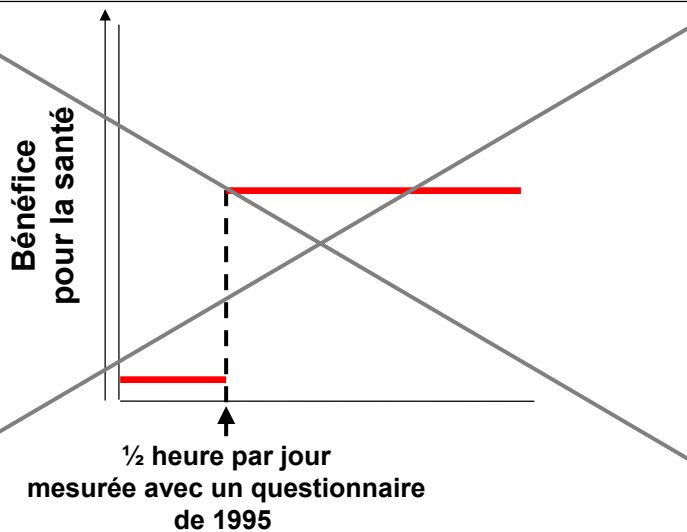
Source: selon Haskell, 1994

## Volume d'activité physique et effets sur la santé

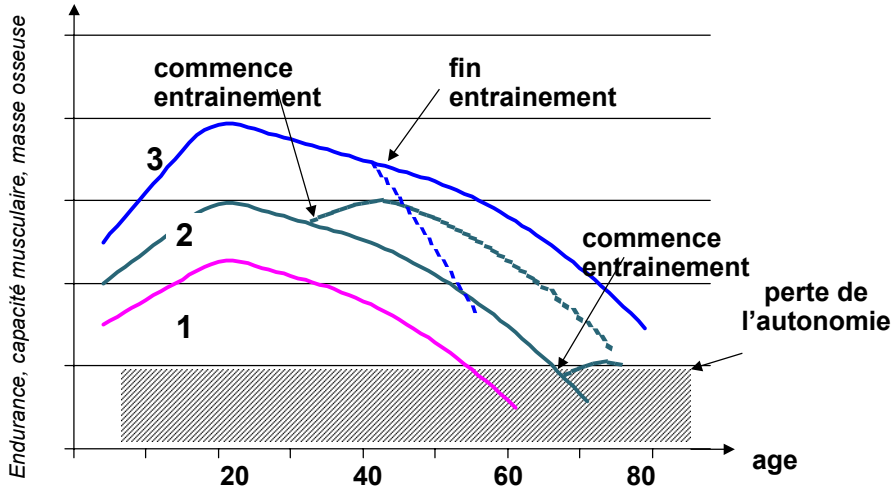


Source: selon Haskell, 1994

## Volume d'activité physique et effets sur la santé

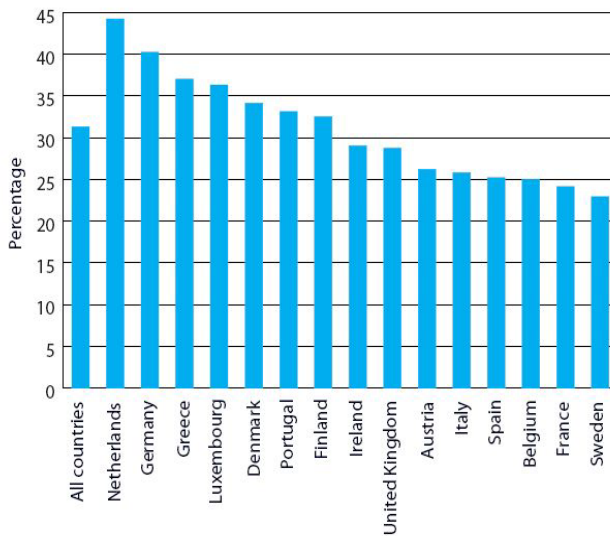


## Age, santé et activité physique

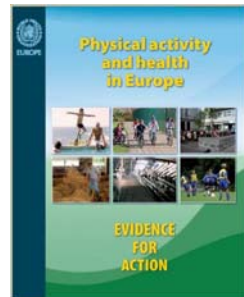


1: inactif      2 modérément actif      3 très actif

Fig. 1. Proportion of adults (aged 15 years or over) in the EU classified as sufficiently active, 2002



Source: Sjöström et al. (8).



Cavill N, Racioppi F, Kahlmeier S. Physical Activity and Health in Europe. Evidence for Action. Copenhagen: WHO, 2006.

Cited source: Sjöström M et al. Health-enhancing physical activity across European Union countries: the Eurobarometer study. Journal of Public Health, 2006, 14(1):1-10.

## Les coûts de la sédentarité

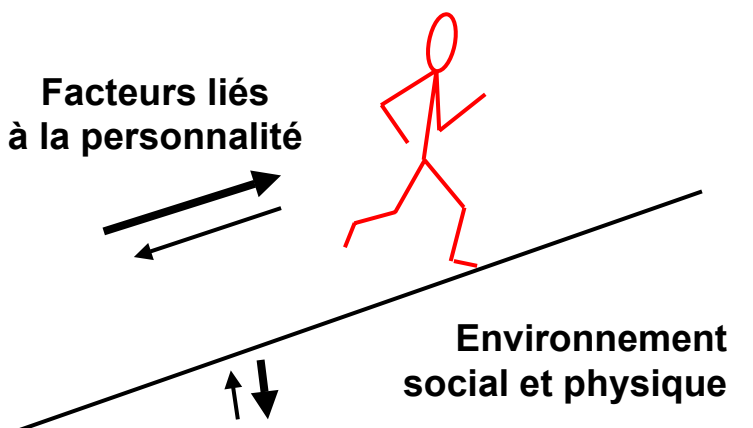


En Suisse, la sédentarité entraîne chaque année au moins 2900 décès prématurés, 2,1 millions de cas de maladies et des frais de traitement directs d'un montant de 2,4 milliards de francs.

Pratiquer une activité physique et rencontrer d'autres personnes: voilà deux éléments qui permettent de construire et de consolider le capital social de toute société.

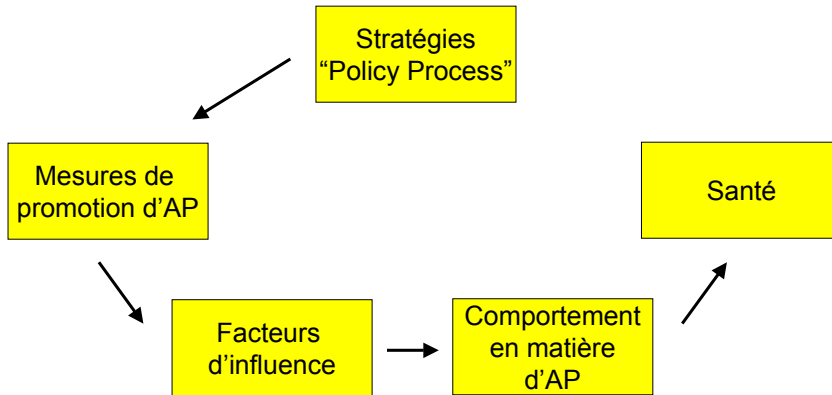
[www.hepa.ch](http://www.hepa.ch)

## Facteurs d'influence ou déterminants du comportement (en activité physique)

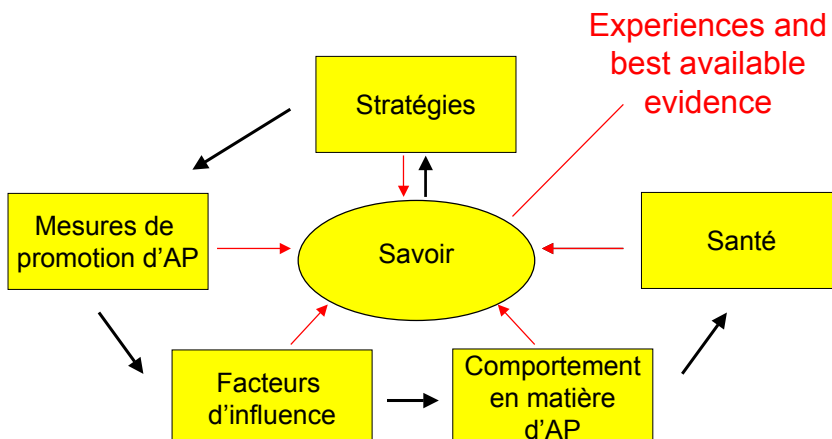


“Policy outcomes are formal written codes, regulations or decisions bearing legal authority, written standards that guide choices; guidelines or unwritten social norms”

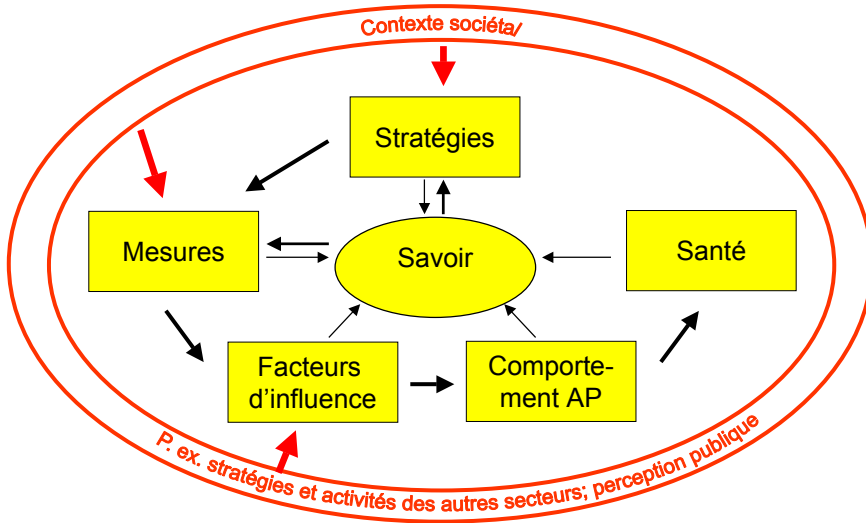
Schmid TL, Pratt M, Witmer L. J Phys Act Health, 2006, 3, S20-S29



### Le concept cadre de la promotion de l'activité physique et la santé basé sur l'évidence de HEPA Europe



# Le concept cadre de HEPA Europe



Document de base

## Activité physique et santé

Schweizerische Eidgenossenschaft  
 Confédération suisse  
 Confederaziun Svizra  
 Confederaziun tudestga

Office fédéral du sport  
 Ufficio federale da la cultura pudica 1997

hepa.ch

Gesundheitsförderung Schweiz  
 Promozion Santé Suisse  
 Promozione Salute Svizzera

7

Why physical activity is healthy

Activity levels in Switzerland

17

Factors influencing our activity behaviour

19

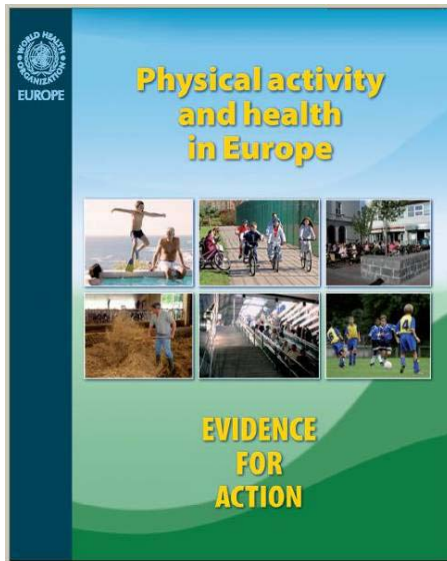
Getting people to be more active

Switzerland already has a very favourable environment... includes leisure time activities, transport-related... and at school in meeting... must understand... that organisations... set their alliances... membership of asso... institutions is also... and be documented... his knowledge can... development of new... progress in the... and sports.

Getting people to be more active  
 Why physical activity is healthy  
 The costs of physical inactivity  
 Activity levels in Switzerland  
 Factors influencing our activity behaviour

[www.hepa.ch](http://www.hepa.ch)

# Survue et exemples de bonne pratique



Cavill N, Racioppi F, Kahlmeier S. Physical Activity and Health in Europe. Evidence for Action. Copenhagen: WHO, 2006.

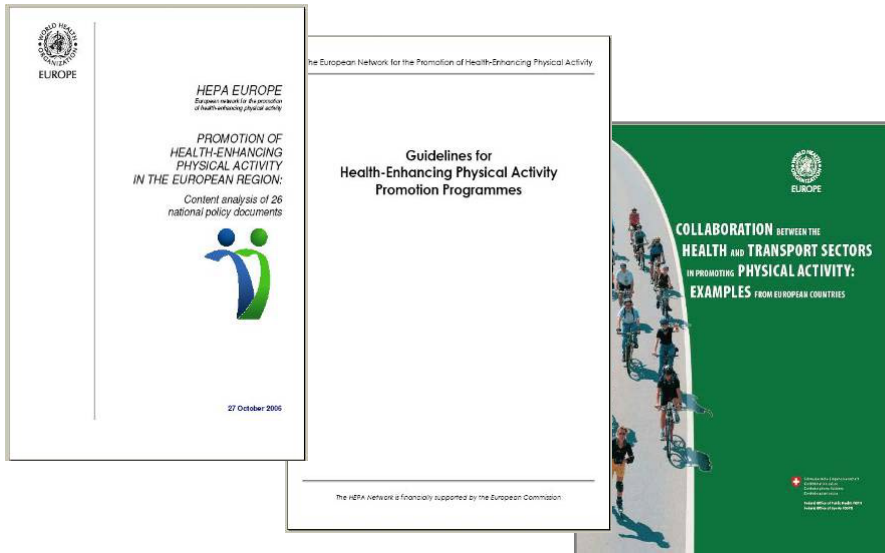
# Survue et exemples de bonne pratique

<p><b>Spotlight. A community on the move: the experience of San Mauro Pascoli, Italy (120)</b></p>		<p><b>Spotlight. The congestion charge in London, United Kingdom (100,101)</b></p>
<p>This project targeted sedentary women and elderly people, to provide an opportunity for social organized physical activities. The outdoors during spring and autumn and winter. Near part, mostly middle-aged women implemented for the long-term continuation of the programme. T GPs, community representatives, social workers, local grass and the private sector.</p> <p>A key finding was that, while more reported to be well aware of physical activity, they lacked to physically active in their own couple, using the local parks. They the opportunity for social interaction included that information and motivation to prompt changes in behaviour without being accompanied by interventions that facilitate physical activity.</p>	<p><b>Spotlight. National sport concept in Switzerland (78)</b></p>	<p>In 2003, London introduced a congestion charging scheme in which cars were charged to enter a zone in the centre of the city. In 2006 the charge is €11.60 per day. The primary objective of the scheme was to reduce traffic congestion in and around the charging</p>
	<p>A new concept for a national sports policy in Switzerland was prepared in 2000. a strategy document for enhancing physical activity of the scientific evidence for</p>	<p>also affected physical activity: there served 20% increase in cycle journeys in crashes. There may also have in journeys walked – both as trips if the increased number of journeys port. London's example shows how intentions can have positive (and some-ly) benefits to public health.</p>
	<p><b>Spotlight. Odense, Denmark's national cycling city (102)</b></p>	<p>Odense was Denmark's official National Cycle City from 1999 to 2002. The Ministry of Transport and the National Road Directorate invested significant funding to demonstrate how coordinated effort could increase cycling. During the four years of the overall programme, 50 projects were developed and implemented, including physical improvements, campaigns and changes in regulations, with an emphasis on trying out innovative ideas.</p> <p>By the end of 2002, cycling traffic in the municipality of Odense had increased by 20% and the number of accidents involving cyclists had been reduced by 20%, compared to 1996/1997. The evaluation estimated savings for the health sector, mostly attributed to increased safety and reduced noncommunicable diseases.</p>

Cavill N, Racioppi F, Kahlmeier S. Physical Activity and Health in Europe. Evidence for Action. Copenhagen: WHO, 2006.



# Analyses des approches sélectionnées



[www.euro.who.int/hepa](http://www.euro.who.int/hepa)

# Groupes de travail pour des sujets spécifiques

[www.euro.who.int/hepa](http://www.euro.who.int/hepa)



## WORK PROGRAMME 2006 / 2007: SUMMARY

HEPA Europe  
European network for the promotion of Health-Enhancing Physical Activity

The European network for the promotion of health-enhancing physical activity (HEPA Europe) was launched in May 2005 as an international, collaborative initiative which closely collaborates with WHO/Europe. "Health-enhancing physical activity" (HEPA) is any form of physical activity that benefits health and functional capacity without undue harm or risk. The overall vision of this initiative is to achieve better health through physical activity among all people in Europe. For more information see [www.euro.who.int/hepa](http://www.euro.who.int/hepa).



At the 2<sup>nd</sup> annual meeting in Tampere, Finland, the following work programme was endorsed for the period July 2006 to June 2007. At the next annual meeting in May 2007, progress on ongoing activities will be reviewed and the next annual work programme will be defined.

### 1. Core activities of the network

Title and aim of the activity
Maintenance and regular updating of the HEPA Europe website ( <a href="http://www.euro.who.int/hepa">www.euro.who.int/hepa</a> )
Holding of the 3 <sup>rd</sup> annual HEPA Europe network meeting (18-19 May 2007, Graz, Austria)
Development of ideas for and possibly organization of a scientific network conference (possibly in 2008)
Support and contributions to other conferences and events upon request
Cooperation and collaboration with other activities, projects, and networks to join forces with key partners and to benefit from synergies

### 2. Projects and products

Title and aim of the activity
Finalization of an advocacy booklet on physical activity and health with the key facts and figures for policy makers
Continue collating an inventory of existing approaches, policy documents, and targets related to physical activity promotion in different countries to facilitate information access for Member States and to develop a framework for process evaluation of physical activity promotion at the national level
Review of examples of national approaches and networks for physical activity promotion, including challenges to overcome, inter-ministerial and sectoral approaches, and the exploration of the need and possibility to create a "network of national networks"
Finalization of the collection of case studies of collaboration between the physical activity promotion and the transport or other sectors to develop an overview of European experiences
Development of a general framework for physical activity promotion policy
Development of a discussion paper on currently used recommendations for health-enhancing physical activity to serve as a basis to assess the scope and desirability to propose common European recommendations



HEPA Europe  
European network for the promotion of health-enhancing physical activity

Survue des activités dans les rapports et programmes de travail à [www.euro.who.int/hepa](http://www.euro.who.int/hepa)

## Implementation of the WHO Global Strategy on Diet, Physical Activity and Health

### A GUIDE FOR POPULATION-BASED APPROACHES TO INCREASING LEVELS OF PHYSICAL ACTIVITY



[www.who.int](http://www.who.int)

# OMS

World Health Organization - Regional Office for the Eastern Mediterranean - Microsoft Internet Explorer

Adresse: <http://www.euro.who.int/>

**World Health Organization**  
Regional Office for the Eastern Mediterranean

المركز الإقليمي للصحة العامة في الشرق الأوسط  
منظمة الصحة العالمية  
الموقع العربي

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**Highlights**

**Restrictions in electricity and fuel supply put health service delivery in Gaza at risk**  
5 December 2007

During the first days of this month a raise in hours of electricity cuts has been observed related to increased consumption in winter times. At the same time the supply of domestic fuel into the Gaza strip has been restricted. As a result, some of the 11 hospitals that are operated by the Ministry of Health are facing severe shortages of diesel and most of the Primary Health Care facilities were obliged to stop emergency generators (no fuel or storage below 100 litres).

[Read the situation report | Palestine.mch.site](#)

**The Regional Office structure, collaborating centres, representatives, partners, employment**  
[More](#)

**Governance**

- Regional Committee for the Eastern Mediterranean Region
- Fifty-fourth session of the Regional Committee of the Eastern Mediterranean
- Resolutions of the Regional Committee
- Regional Consultative Committee

**Regional Director**

Biography, annual reports, messages.  
[More](#)

**Latest Regional Director's Report 2006**  
Arabic | English | French

**World AIDS Campaign 2007**  
1 December 2007

The global theme for World AIDS Day 2007 and 2008 is "leadership".

# Agita Mundo

www.agitamundo.org

## Global Alliance on Physical Activity GAPA

www.globalpa.org.uk

## La situation en 2007

- Encore des questions à résoudre, surtout concernant la quantification des effets. Néanmoins, l'évidence pour l'importance de l'activité physique pour la santé est convaincante
- Défi actuel: augmenter l'activité physique au niveau des populations et documenter le succès des interventions

### C'est un grand défi... ... mais le succès est possible

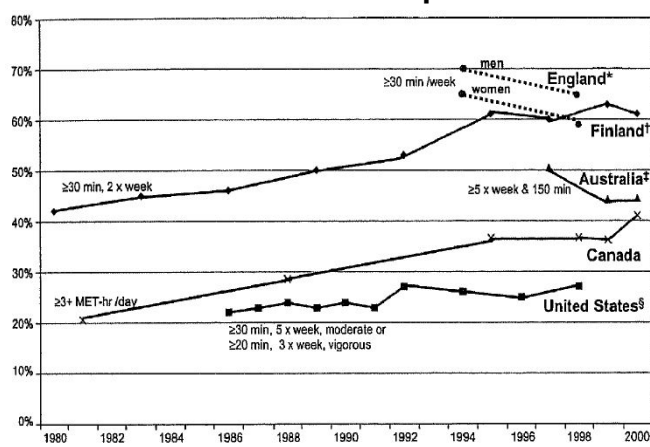


Figure 2. Physical activity trends, 1981-2000

\* Source: Ref. 6

† Source: Ref. 3

‡ Source: Ref. 5

§ Source: Ref. 4