

Physical inactivity as a major risk factor

- Worldwide, physical inactivity causes at least 6–10% NCDs (CHD, diabetes, breast and colon cancer)*
- Physical inactivity causes 9% premature mortality*
- In Europe, estimates indicate that more than one third of adults are insufficiently active**

*Lee IM & al. 2012; **Hallal PC & al. 2012

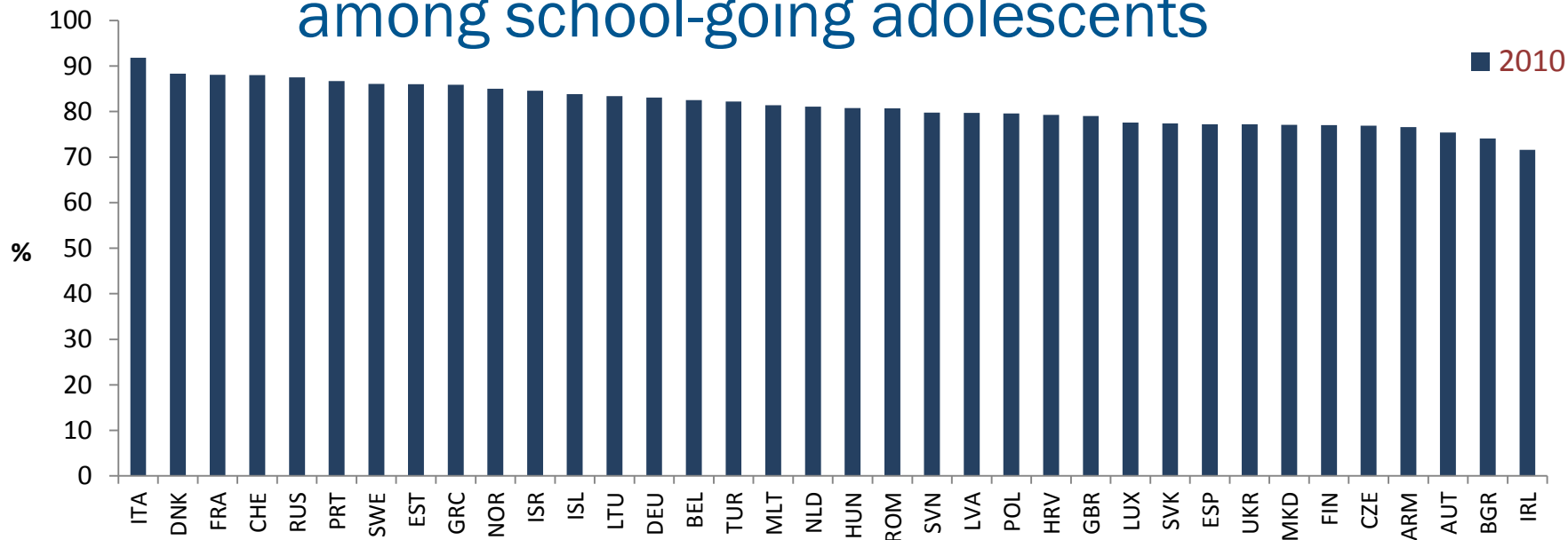


Physical inactivity & the obesity epidemic

- In addition to being an independent risk factor for NCDs, physical inactivity is also related to overweight and obesity (*energy imbalance*)
- With over 50% population overweight in almost all 53 European countries, all people can benefit from being more active
- But above all, it is also important for **mental health and well-being**



Prevalence of insufficient physical activity among school-going adolescents



Global Health Observatory Data Repository. Geneva: World Health Organization (<http://apps.who.int/gho/data/view.main.2463ADO?lang=en>, accessed 1 May 2015). No data for ALB, AND, AZE, BLR, BIH, CYP, GEO, KAZ, KGZ, MNE, MDA, SMR, SRB, TJK, TKM, UZB

Mission of our work

To inspire governments and stakeholders to work towards increasing physical activity for all by:

- promoting physical activity
- **creating enabling environments**
- ensuring equal opportunities
- removing barriers



Guiding principles

- Reduce **inequities**
- Promote a **life-course approach**
- Empower people and **communities**
- Promote **integrated, multisectoral**, sustainable and partnership-based approaches
- Ensure **adaptability** of physical activity programmes
- Use **evidence-based strategies**



WHAT ARE GOVERNMENTS DOING?

Physical activity

for children and young people
(5–18 Years)



BUILDS
CONFIDENCE &
SOCIAL SKILLS



MAINTAINS
HEALTHY
WEIGHT



DEVELOPS
CO-ORDINATION



STRENGTHENS
MUSCLES
& BONES



IMPROVES
SLEEP



IMPROVES
CONCENTRATION
& LEARNING



IMPROVES
HEALTH
& FITNESS



MAKES
YOU FEEL
GOOD

Be physically active

Spread activity
throughout
the day

Aim for
at least
60
minutes
everyday

All activities
should make you
breathe faster
& feel warmer



Include muscle
and bone
strengthening
activities
**3 TIMES
PER
WEEK**



Sit less

Move more

Find ways to help all children and young people accumulate
at least 60 minutes of physical activity everyday

UK Chief Medical Officers' Guidelines 2011 **Start Active, Stay Active: www.bit.ly/startactive**

Physical activity benefits for adults and older adults



BENEFITS HEALTH



IMPROVES SLEEP



MAINTAINS HEALTHY WEIGHT



MANAGES STRESS



IMPROVES QUALITY OF LIFE

REDUCES YOUR CHANCE OF

Type II Diabetes	-40%
Cardiovascular Disease	-35%
Falls, Depression and Dementia	-30%
Joint and Back Pain	-25%
Cancers (Colon and Breast)	-20%

What should you do?

For a healthy
heart and mind

To keep your muscles,
bones and joints strong

To reduce your
chance of falls

Be
Active

Sit
Less

Build
Strength

Improve
Balance

VIGOROUS



MODERATE



MINUTES PER WEEK

75 OR 150

VIGOROUS
INTENSITY
(BREATHING FAST
DIFFICULTY TALKING)

MODERATE
INTENSITY
(INCREASED BREATHING
ABLE TO TALK)

OR A COMBINATION OF BOTH

BREAK UP
SITTING
TIME

2
DAYS PER
WEEK

Something is better than nothing.

Start small and build up gradually:
just 10 minutes at a time provides benefit.

MAKE A START TODAY: it's never too late!

UK Chief Medical Officers' Guidelines 2011 **Start Active, Stay Active: <http://bit.ly/startactive>**

Supporting professionals

FACTSHEET 1

Physical activity guidelines for

EARLY YEARS (UNDER 5s) – FOR INFANTS WHO ARE NOT YET WALKING

1. Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
2. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

Individual physical and mental capabilities should be considered when interpreting the guidelines.

Examples of physical activity that meet the guidelines

For infants who are not yet walking, physical activity refers to movement of any intensity and may include:

- 'Tummy time' – this includes any time spent on the stomach including rolling and playing on the floor
- Reaching for and grasping objects, pulling, pushing and playing with other people
- 'Parent and baby' swim sessions

Floor-based and water-based play encourages infants to use their muscles and develop motor skills. It also provides valuable opportunities to build social and emotional bonds.

Minimising sedentary behaviour is also important for health and development and may include:

- Reducing time spent in infant carriers or seats
- Reducing time spent in walking aids or baby bouncers (these limit free movement)
- Reducing time spent in front of TV or other screens

What are the benefits of movement?

- Develops motor skills
- Improves cognitive development
- Contributes to a healthy weight
- Enhances bone and muscular development
- Supports learning of social skills

For further information: *Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers (2011)*

FACTSHEET 2

Physical activity guidelines for

EARLY YEARS (UNDER 5s) – FOR CHILDREN WHO ARE CAPABLE OF WALKING

1. Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.*
2. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

* Most UK pre-school children currently spend 120–150 minutes a day in physical activity, so achieving this guideline would mean adding another 30–60 minutes per day.

Individual physical and mental capabilities should be considered when interpreting the guidelines.

Examples of physical activity that meet the guidelines

Physical activity is likely to occur mainly through unstructured active play but may also include more structured activities. Activities can be of any intensity (light or more energetic) and may include:

- Activities which involve movements of all the major muscle groups, i.e. the legs, buttocks, shoulders and arms, and movement of the trunk from one place to another
- Energetic play, e.g. climbing frame or riding a bike
- More energetic bouts of activity, e.g. running and chasing games
- Walking/skipping to shops, a friend's home, a park or to and from a school

Minimising sedentary behaviour may include:

- Reducing time spent watching TV, using the computer or playing video games
- Reducing time spent in a pushchair or car seat – this can also help to break up long periods of sedentary behaviour

What are the benefits of being active for at least 180 minutes each day?

- Improves cardiovascular health
- Contributes to a healthy weight
- Improves bone health
- Supports learning of social skills
- Develops movement and co-ordination

For further information: *Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers (2011)*



REGIONAL OFFICE FOR EUROPE

Organization

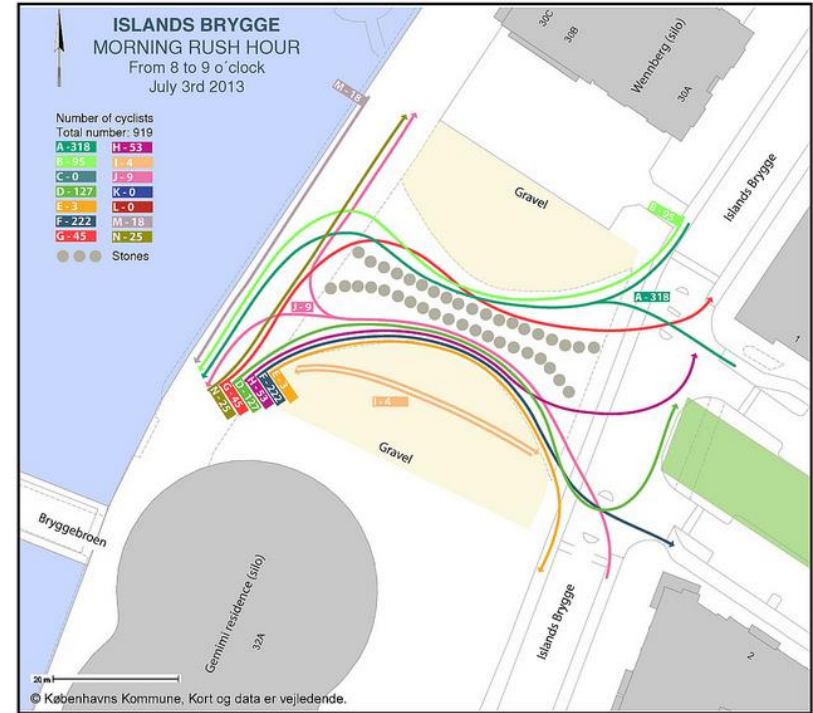
EUROPE Focal Points Network

WHO REGIONAL COMMITTEE FOR EUROPE - 65th SESSION

Vilnius, Lithuania, 14–17 September 2015

Urban design and transport policy

- Macro-level urban design and planning should consider:
 - Connected street networks
 - Residential density and land use
 - Access to public transport
 - Open spaces
- Cities should also provide safe and adequate infrastructure to support walking and cycling



Urban design and transport policy - evidence

- The way in which urban areas are planned – the lay out and rules about what can be built and where – is linked with physical activity levels
- Higher residential density, logical and walkable street networks, and zoning to encourage mixed use (e.g. retails, parks, schools, essential services) encourage active transport



Urban design and transport policy

- Walking and cycling paths should be well maintained, unobstructed and connected with safe crossing points
- Implement complementary road traffic control measures to reduce pedestrian and cyclists' exposure to high traffic volume and speed
- Land can be re-purposed for public use (e.g. vacant lots, waterway paths)



What about the balance of benefits vs. risks?

Modeled impact both on society and for individuals when 500,000 people would make a transition from car to bicycle for short trips on a daily basis in the Netherlands

- increased inhaled air pollution doses: 0.8-40 days lost
- traffic accidents: 5-9 days lost
- increased physical activity: 3-14 months of life gained
- societal benefits even larger

➡ **positive effects of active transport far greater than risks**

Source: Johan de Hartog J, Boogaard H, Nijland H, Hoek G.: Do the health benefits of cycling outweigh the risks? Environ Health Perspect. 2010 Aug;118(8):1109-16. Epub 2010 Jun 11.

The WHO Health Economic Assessment Tool



The screenshot displays the HEAT website. On the left is a navigation menu with the HEAT logo and links for Introduction, HEAT for cycling, HEAT for walking, Current Assessment, Previous Assessments, and Acknowledgements. The main content area is titled 'Welcome to the WHO/Europe Health Economic Assessment Tools (HEAT) for walking and for cycling.' It includes an introduction paragraph, a list of situations where the tool can be used (starting with '1. When planning a new piece of cycling or walking infrastructure'), and a paragraph explaining how HEAT attaches a value to the estimated level of cycling or walking. On the right, there is a 'More information' section with a sub-header 'What data do I need?' and a paragraph explaining the data requirements, followed by a 'more...' link.

HEAT
Health economic
assessment tool

Introduction

- HEAT for cycling
- HEAT for walking
- Current Assessment
- Previous Assessments
- Acknowledgements

HEAT ► Introduction

Welcome to the WHO/Europe Health Economic Assessment Tools (HEAT) for walking and for cycling.

This tool is designed to help you conduct an economic assessment of the health benefits of walking or cycling by estimating the value of reduced mortality that results from specified amounts of walking or cycling.

The tool can be used in a number of different situations, for example:

- 1. When planning a new piece of cycling or walking infrastructure.**

HEAT attaches a value to the estimated level of cycling or walking when the new infrastructure is in place. This can be compared to the costs of implementing different interventions to produce a benefit:cost ratio (and help to make the case for investment), or as an input into a

More information

What data do I need?

To produce an assessment, you need to provide data on the number of people walking or cycling, and the amount of walking they are doing (or are projected to do).

[more...](#)

How much is reduced mortality from regular walking and cycling worth?

Integration of health effects in transport assessments: challenges

- Complex methodological questions for transport planners:
 - which health endpoints to include?
 - form of the relationship between exposure and effect?
 - activity substitution
 - which costs to include?
 - how to calculate costs?
 - which time lag periods to apply before benefits/costs occur?

The question

If x people walk/cycle a distance of y kilometres on most days, what is the economic value of the health benefits that occur as a result of the reduction in mortality due to their physical activity?

Key considerations – tailoring action

- Studies comparing built environment attributes across different countries demonstrate a wide variety of diversity in urban form and challenges (“Don’t tell me to be like Copenhagen or Amsterdam”)
- Different cities have different opportunities and different starting points
- Ensure benefits reach those with greatest need, in an appropriate way (older people; low SES groups; women; ethnic minorities)



WHO Healthy Cities Network

- A healthy city is defined by a **process**, not an outcome
- A healthy city is not one that has achieved a particular health status
- It is **conscious of health** and **striving to improve it**
- A healthy city is one that continually creates and **improves its physical and social environments** and expands the **community resources**
- This entails:
 - explicit political commitment;
 - leadership;
 - institutional change; and
 - intersectoral partnerships

DENMARK PHYSICAL ACTIVITY FACTSHEET

This is one of the 28 European Union Member States fact sheets on health-enhancing physical activity, developed as part of a study funded by the European Commission (2012 and 2014) together with the World Health Organization. The study was coordinated by the WHO Regional Office for Europe in the context of the implementation of the European Commission's 2012-2020 Strategy for Europe on health and well-being. The study was funded by the European Commission (2012-2020) and the World Health Organization (2012-2014). The Regional Office for Europe is grateful to the European Commission (2012) for its financial support for the preparation of this factsheet.



World Health
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DENMARK

PREVALENCE (%) OF ADOLESCENTS REACHING WHO
RECOMMENDED PHYSICAL ACTIVITY LEVELS, 2013/2014

%	ADOLESCENTS		
	11 YEARS	13 YEARS	15 YEARS
MALES	20	16	15
FEMALES	11	12	7

Total population: 5 627 235
Median age: 45.2 years
Life expectancy at birth: males 78.3 years
Life expectancy at birth: females 82.4 years
GDP per capita: €44 400
GDP spent on health: 10.38 (%)

PORTUGAL PHYSICAL ACTIVITY FACTSHEET

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World Health
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PORTUGAL

PREVALENCE (%) OF ADULTS THAT ENGAGED IN
MODERATE- AND VIGOROUS-INTENSITY PHYSICAL ACTIVITY
FROM EUROBAROMETER, 2014

%	ADULTS	
	MODERATE-INTENSITY**	VIGOROUS-INTENSITY**
BOTH SEXES	14	9

**moderate- and vigorous-intensity physical activity on at least 4 days within the past 7 days

Total population: 10 427 303
Median age: 43.2 years
Life expectancy at birth: males 77.6 years
Life expectancy at birth: females 84.0 years
GDP per capita: €13 900
GDP spent on health: 10.26 (%)

NETHERLANDS PHYSICAL ACTIVITY FACTSHEET

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NETHERLANDS

PREVALENCE (%) OF ADULTS MEETING THE RECOMMENDED
PHYSICAL ACTIVITY LEVELS, 2014

%	ADULTS (18+ YEARS)	
	MINOR	COMBINED
MALES	58.7	26.5
	FITNESS	63.5
FEMALES	58.2	22.6
	FITNESS	59.9
BOTH SEXES	58.5	24.5
	FITNESS	60.7

Total population: 16 900 726
Median age: 42.0 years
Life expectancy at birth: males 83.2 years
Life expectancy at birth: females 85.7 years
GDP per capita: €36 900
GDP spent on health: 12.1% (2013) (1)

Food Environment Description in Cities from Central Asia and Caucasus



- To characterize the street food environment in urban settings, including the **vending places**, their **food offer**, and **customer characteristics**
- To document **food marketing** in public places, using photography and 360 film
- To report the **content of trans-fatty acids and sodium in foods** sold in the streets, based on laboratory analyses of locally-obtained food samples



cities

Food Environment Description in Cities from Central Asia and Caucasus

