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CYCLING & HEALTH

Randy Rzewnicki, PhD,
Randy@ecf.com
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In this presentation:

1. Health benefits of cycling
2. HEAT: counting the economic benefits
3. A few initiatives

1. Physical activity and health

Physical *in*activity:
A leading risk factor for health

In Europe:

nearly 1,000,000 **deaths** per year

Physical *in*activity estimated to cause

- 21–25% of breast and colon cancer burden
- 27% of diabetes burden
- 30% of ischemic heart disease (IHD) burden

Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Department of Health and Human Services, 2008.

Physical activity improves health & reduces risks

- Minus 20-30% morbidity and mortality from
 - Coronary Heart Disease (CHD)
 - Cardio-vascular Disease (CVD)
- Minus 20 – 40% cancer risks
- Minus 30% for developing functional limitations
- Minus 30% for premature all-cause mortality

Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Department of Health and Human Services, 2008.

Physical Activity good for mental health too

- Physical Activity
 - protects people from getting depressed
 - reduces symptoms of depression for all
- Prevents risk of job burn out
- Creates more mental fitness, healthy adults

Ref: US guidelines committee report, 2008
Toker & Biron 2012: Depression & Work Productivity

The economic cost of obesity

- EU-15 region: 32.8 billion euros
- Australia - \$3.6 billion
- But weight control is only 1 benefit of PA.

How can people do PA every day?

Active Mobility is THE solution.

Walking & cycling to work, to school, to shop, to public transport, etc.

2. Health benefits of cycling

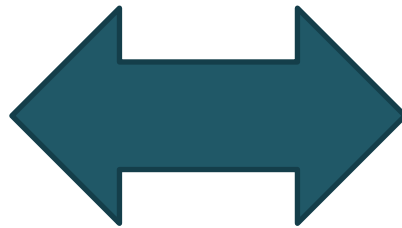


Benefits of Cycling include...

- Cardiovascular fitness
- Protect joints
- Spine/back
- Mental stress
- Immune system
- Muscles
- Skeletal system
- Balance & equilibrium
- Oxygen & circulation
- Overweight & obesity
- Body fat & cholesterol
- Blood pressure
- Cancers
- Stamina
- Attractiveness & anti-aging
- Physical workout
- Quality of life

What is the balance of benefits of cycling vs. risks?

More
exposure to
air pollution
&
crashes?



Lack of
physical
activity?

Cycling for Transport: More Benefits than risks (1)

Increased exposure to air pollution & traffic crashes is small

Compared to the much greater benefits of more physical activity

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.

Cycling for Transport: More Benefits than risks (2)

Bicing - *bicycle sharing scheme Barcelona*

Health benefits of physical activity from using cycles were large compared with the *risks* from breathing air pollutants & road traffic incidents.

Source: Rojac-Rueda, D et al „The health risks and benefits of cycling in urban environments compared with car use: health impact assessment study“ BMJ 2011; 343: d4521 doi: 10.1136/bmj.d4521

Active transport as part of policies to reduce greenhouse gases emissions provides important health benefits

Health effects from increased physical activity for transport are much greater than benefits from low polluting cars.

Source: Woodcock et al – Public health benefits of strategies to reduce greenhouse-gas emissions - :urban land transport – 2009 Lancet published online November 25, 2009



What are the costs?

The economic value of physical activity

- Cost of physical inactivity
 - Direct Health / Medical costs
 - Indirect economic and social costs
- Costs of interventions
 - Physical activity health care
 - Environmental interventions

Cost of
doing
nothing

Cost of
doing
something

MORE PHYSICAL ACTIVITY SAVES LIVES & SAVES MONEY



Economic analyses of transport infrastructure and policies including health effects related to cycling and walking: A systematic review[☆]

Nick Cavill^{b,*}, Sonja Kahlmeier^a, Harry Rutter^b, Francesca Racioppi^a, Pekka Oja^b

^a WHO Regional Office for Europe

^b Cavill Associates, Mercury Offices, 185A Moss Lane, Bramhall, Stockport, Cheshire SK7 1BA, UK

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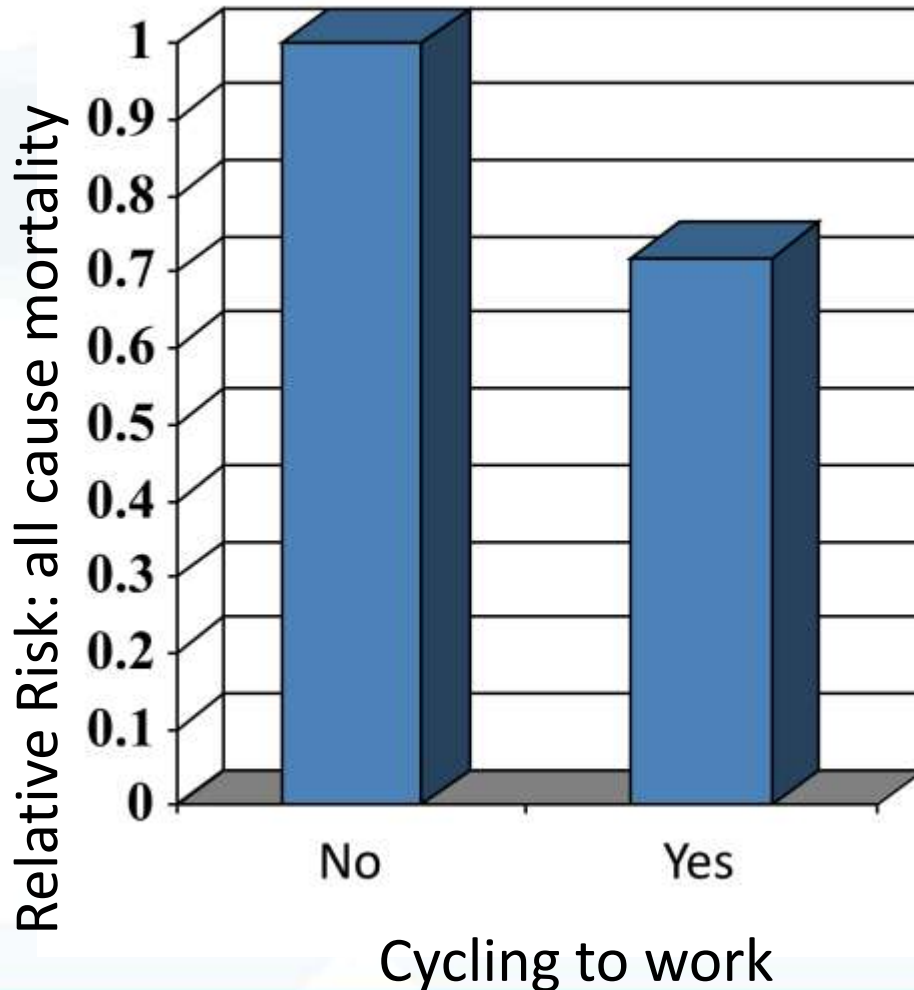
Keywords:
Economic
Health
Walk
Cycle

ABSTRACT

We reviewed published and unpublished studies that presented the findings of an economic valuation of an aspect of transport infrastructure or policy, and included data on walking and/or cycling and health effects in the valuation. We included 16 papers, of which three were classified as 'high'; six as 'moderate' and seven as 'low' quality. There is a wide variation in the approaches taken for including the health effects of physical activity in economic analyses of transport projects. This is not helped by a lack of transparency of methods in many studies. A more standardised approach is called for, including a clearer description of the applied methods and assumptions taken.

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Cycling to work can save lives



Adults cycling to work have less risk of dying prematurely.

Results consistent with other cycling & physical activity studies.

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HEAT Impacts

- **Boston – USA**
 - Used HEAT to calculate the costs to health if a bus line were shut down
- **Hungary**
 - Used HEAT to explain the costs and the benefits
- **New Zealand:**
 - used HEAT on Auckland Harbour Bridge plans for cycling and pedestrian facilities
- **EU-27**
 - HEAT shows over 100 bn euros health benefit



Hungarian transport minister Völner Pal officially declares support for the National cycling charter, locking in 400 million euros for cycling -18 SEP 2013

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THE NEW CYCLING ECONOMY

EUROPEAN CYCLISTS FEDERATION

 **34,000,000**

Europeans had the bicycle as
their preferred mode of
transportation in 2010

 **200 Billion €**

is the annual value of their
cycling's contribution to the
EU

 **That equals 100%**

of the GDP of Denmark

Health benefits
are over 50% of
the total

The New Cycling Economy: € 200 bn /year

All internal and external benefits of cycling together,

- based on 7,4% of use of the bicycle in Europe ([Eurobarometer 2010](#)),
- adding the turnover of related industries,
- well above € 200 bn annually,
- more than € 400 for every person that lives in the EU.
- biggest single chunk is health, with over € 110 bn annually.

ECF used [Health Economic Assessment Tool \(HEAT\)](#)
[for Cycling](#)

[More info at ECF](#)

The new cycling economy

Economic benefits of cycling in EU-27	2010
Health	€121 bn
Congestion-easing	€ 24 bn
Fuel savings	€6 bn
Reduced CO2 emission	€3 bn
Reduced air pollution	€ 1 bn
Reduced noise pollution	€ 0.3 bn
Tourism industry	€ 44 bn
Bicycle manufacture	€ 18 bn
Combined total	€ 217 bn

More Cycling benefits: Economic, Social, Environmental & Transport

WHO recommends cycling

- For health and climate
 - “Safe cycling/walking networks are good for both health and climate”
- For children
 - preventing injuries and ensuring adequate physical activity for all children

“Health co-benefits of climate change mitigation - Transport sector” 6Dec2011 at COP-17.

Cycling helps transport, environment & health sectors achieve *their own* goals(1)

Goals	Interest
Less air pollutants and CO2 Less noise	Environment, Health
Less congestion	Transport
Less road traffic injuries	Transport, Health

Cycling helps transport, environment & health sectors achieve *their own* goals(2)

Goals	Interest
Less investments in infrastructure for more cars	Transport
More accessibility and quality of urban life	Transport, Health
More physical activity	Health

+ 100 MILLION
MORE EUROPEANS MOVING BY 2020





Encouraging the broadest possible
participation in sports and physical activity

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Premier organizations with the necessary **expertise** and **experience** to effectively maximize the reach of the **NowWeMove Campaign**.

Great potential to access an **extensive network** in over 30 countries and to reach a **global** and **diverse** audience across Europe.

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MOVE WEEK EVENTS

Event scale



**LOCAL
EVENTS**



**NETWORKING
COMMUNITY EVENTS**



**FLAGSHIP
EVENTS**

Event type

Tournaments

School & University

Open door

Public space

Office & Workplace...



MOVE WEEK

2012



2013



2014



2015



2016

Individual participants	140.000	250.000	350.000	500.000	1.000.000
Countries involved	23	31	35	38	42
MOVE Week activities	250	500	600	750	1000

★ EXPECTED MINIMUM PARTICIPATION

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FIND THE MOVE

THAT MOVES YOU

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3. More cycling is a realistic option



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Thank you for your attention !

For more information

randy@ecf.com

www.ecf.com

Rue Franklin, 28 1000 Brussels, Belgium Phone: +32 2 880 92 74 Fax: +32 2 880 92 75 office@ecf.com

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