Brigit Staatsen
RIVM

Harnessing benefits for
health and wellbeing in
cities from exposure to blue
and green spaces
How does Urban Planning affect health?

**Physical factors** *(some examples)*

- Road severance
- Lack of facilities in neighbourhood (shops, places to go)
- Lack of local informal recreational opportunities (allotments, play parks)
- Unattractive, poorly designed pedestrian routes (road traffic dominated routes)
- Poor insulation, waste of solar insolation
- Lack of opportunity for food growing

**Links**

- Lack of opportunity for informal interaction in the community
- Isolation
- Air-polluted local walking environments
- Fuel poverty
  - Lack of regular exercise
  - Food deserts, poor diet

**Associated health issues**

- Mental wellbeing
- Respiratory disease
- Heart disease and Obesity issues
INHERIT AIMS

MODIFYING:
- Lifestyles
- Behaviours

AIMING FOR A "TRIPLE WIN":
- Health
- Equity
- Environment

INTERSECTOR POLICIES AND INTERVENTIONS
Figure 1: INHERIT Model
Baseline review: green space

Current situation:
✓ Quantity and quality of green space in Europe under pressure
✓ Less connection with nature
✓ Interest nature based solutions

Potential ‘triple win’:
✓ Climate change mitigation
✓ Positive effects mental and physical health
✓ Potentially impact noise, air pollution
✓ Negative impact: increased risk vector-borne diseases, allergies
✓ Positive impacts on lower SES, children, older people
How to stimulate use of green space

Capability:
provide education & information, organise activities in green space

Opportunity:
provide green space that is attractive, safe, easily accessible, within (perceived) walking distance

Motivation:
involve community, make it fun

Promising practice:
Green gyms, for every £1 invested in Green Gyms, £2.55 will be saved in treating physical inactivity related illness.
Furthermore...

- combine provision of greenspace & activities
- involve potential users in design of green space
- many inspiring policies and interventions: only a few evaluated
- interventions often focused on one dimension (environment, health or equity), but potential to be beneficial in more respects
INHERIT database

Search

European Country/Countries
- Austria
- Belarus
- Belgium
- Bulgaria
- Croatia

Field
- Energy efficient housing: Other
- Living/Green space
- Urban food gardens
- Living/Green space

Found 7 Results

Die Essbare Stadt Andernach (Edible City Andernach) – urban gardening plan

Essen – Grüne Hauptstadt Europas 2017 (European Green Capital – Essen)

Kinder gestalten ihren Naschgarten (Children make their own garden)

Coisas da Quinta – green space initiative for people with disabilities

Circular economy (policy interventions)

Beyond a Construction Site – creating community green spaces

Green Flag – EU-wide initiative to promote green schools and environmental awareness
The Conservation Volunteers (TCV) created and runs Green Gyms® across the UK. The aims of Green Gyms are to improve health and the environment at the same time. Objectives are to improve health and wellbeing – by increasing or maintaining fitness, reducing isolation and supporting better mental wellbeing, and increase employability – by increasing knowledge, skills and confidence.

Green Gyms are free outdoor sessions where people are guided in practical activities such as planting trees, sowing meadows and establishing wildlife ponds. Unlike other conservation projects, the emphasis is very much on health and fitness – volunteers warm up and cool down in preparation for a range of light to vigorous activities to suit all abilities.

Green Gyms are a weekly activity, running for 3-4 hours at a local community facility such as a park, usually in the day time on a weekday. Each Green Gym has up to 50-60 volunteers, with turnout on any one week typically ranging from six to 20.

Green Gyms are available to everyone, people can just turn up and join in. GPs now prescribe Green Gym® sessions to patients to encourage them to improve their health and wellbeing. By taking part, participants are encouraged to make positive changes to their lifestyle, such as walking and cycling more.

**Target Group**
General population. Those who have been recommended to join by their doctors

**Evaluation**
Yes

**Level**
Local, National

**INHERIT Perspective**
Green gyms help to improve health, social inclusion and the environment at the same time. They enable participants to increase or maintain fitness, help reduce isolation and support better mental wellbeing, and increase employability – by increasing knowledge, skills and confidence. Green gyms are available to any person in the community, but benefits are greater for those with poorer health. They improve the environmental state in local areas, and influence individual exposure and experience through participation in physical activities that improve aspects of the local environment.

**Detailed description PDF filename**
Download file

**Relevant links**
http://www.tcv.org.uk/greengym

**Contact**
greengym@tcv.org.uk
Current understanding

What research has already been done?

We know that **greenspace is good** for health and wellbeing.


Including **virtual reality green spaces**

(Deplege 2011; Knight 2012; Stone 2014)
Current understanding

Where are the gaps?

● Much less is known about the effects of blue space on health

● And urban blue infrastructure in particular.

● Could this be a resource to tackle 21st Century challenges?

● Systematic review Bluehealth: Consistent evidence of positive associations between blue space exposure and mental health and physical activity
BlueHealth aims

**What are we trying to achieve?**

- Shed light on how blue spaces affect health and wellbeing of people across the world.
- Understand how changes to urban blue infrastructure can be made in ways that benefit public health.
- Develop clinical applications of virtual reality blue spaces.
Community interventions/Case Studies

‘Urban acupuncture’

- A series of small-scale interventions
- Based on boosting use of blue spaces
- Assessing impacts on physical and mental health
- Interact with local communities, stakeholders
- Projects are taking place across Europe
Future scenarios

Building in resilience

- Evaluating impact of changing climate, environment and socio-economics on urban blue areas and public health
- Looking forward to 2040
- Examining impacts of:
  - Flooding
  - Water quality
  - Urban heat islands
Main conclusions

- Combination of structural measures, aiming at changing driving forces and behavioural measures most effective
- Need to understand & address the socio-economic & demographic trends driving the current systems
- Adapting lifestyles into healthy, sustainable practices requires coherent action from policy makers (across sectors), private sector and citizens: health in all policies
- Limited insight in effects and related costs & benefits of urban interventions as yet
- More longitudinal studies and natural experiments are needed to better understand issues of causality

INHERIT and BLUEHEALTH will provide more insight
THANK YOU!

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www.inherit.eu
www.bluehealth2020.eu

Recent media coverage:
bit.ly/2f3Evge
RESERVE, in CASE of QUESTIONS
INHERIT Process

- Baseline Review Analysis
- Common Analytical Framework
- 50 Promising Practices
- Visioning and Future Scenarios
- 12 Pilot Projects
- Impact Assessment
- Policy Kit
INHERIT Partners
Workpackages

What will we do?

- Reviewing and Creating the Evidence
- Pan-European Survey
- Community interventions
- Virtual realities
- Landscape & urban planning
- Future scenarios
- Translating the evidence
- Innovation and engagement
BlueHealth

An international multi-partner project