BREATHE LIFE
Clean Air. Healthy Future.
Transport: a 'facilitator' and 'burden' on health

- Transport systems offer vital access to health-essential goods, services, education and employment – and to physical activity and social networks.

- Poorly designed transport systems create a health burden directly (injury risks) and indirectly (equity, access, social cohesion, etc.).

- Conventional transport & health research & tracking tools fail to capture the full range of positive & negative health impacts.
Transport & Health Linkages
urban land use & energy demand, air pollution, physical activity & injury risks
Global transport health burden (annual)

- Outdoor air pollution → 4 million deaths
- Physical inactivity → 3.2 million deaths; 19 million healthy life years lost
- Traffic injuries → 1.24 million deaths
- Traffic noise → stress, memory loss and analytical impairment
- Climate change → over 250 000 deaths
- Access to vital goods and services, social networks/equity/cohesion → under reported
1. Transport drives climate change: Road transport + housing = one-third of CO$_2$ emissions
2. Air pollution: Transport inefficiencies, poor fuels/vehicles result in particularly high to PM$_{10}$ exposures in developing cities
3. Transport shapes land use → energy & pollution: Energy demand in European cities is 1/5 of USA

Mid-density European cities use only 20% of the energy/per capita of transport systems in North America

Mid density means shorter vehicle travel times = fewer pollution emissions – (tailpipe controls may also mitigate some emissions).

Mid-density means public transport systems can more efficiently serve passengers.

Source: WHO, 2012/International Association of Public Transport, 2005
4. Transport drives physical activity: As African cities develop, what model, if any, will they follow?

More car-dependent and sprawling (USA model)
Or, more energy-efficient & walkable (European)

<table>
<thead>
<tr>
<th>% by travel mode</th>
<th>Asian cities (avg. of high&amp;low)</th>
<th>European cities</th>
<th>USA cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active travel</td>
<td>19%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Transit</td>
<td>43%</td>
<td>23%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Peterson R. Sustainable Transport, a Sourcebook for Policymakers, BMZ, 2002
5. Transport drives injury risks: But safety aspects of rail/bus transport largely ignored

- Rail and bus are the safest modes of travel (ETSC, 2003), even so:
  - Priority is given to individual injury protection over “systems” approaches.
  - Few health-oriented studies on injury impact of transit interventions
  - Transport planning gives little priority to the comparative advantages of transit in terms of injury risks
But --- Transport indicators continue to measure focus on road vehicles – not people

Kilometres of paved road per square kilometre

(a little bit of) public transport ridership

Average speed of car/truck traffic flow

Car/motorcycle ownership per 1000

(a little) urban air pollution
Indicators of Healthy Transport:

We need to track impacts in four domains

- Access/equity of access
- Physical activity
- Pollution (air, noise and water)
- Traffic injury

Measuring **access/physical activity** – can inform us about key health **benefits** of sustainable transport.

Measuring **pollution and injury** – can inform us about key health **risks** of transport systems.
Example 1. Global data on injuries not systematically collected for bus/rail travel mode

Data Collection for Modes of Travel Includes:

- Cyclists;
- Drivers/passengers of 4-wheeled vehicles;
- Drivers/passengers of motorized 2- or 3- wheelers;
- Other unspecified road users;
- Pedestrians.

Total number of road traffic deaths by country - WHO 2010

<table>
<thead>
<tr>
<th>Number of Deaths by Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark Green</td>
<td>&lt;1000</td>
</tr>
<tr>
<td>Light Green</td>
<td>1001-5000</td>
</tr>
<tr>
<td>Yellow</td>
<td>5001-10000</td>
</tr>
<tr>
<td>Tan</td>
<td>10001-50000</td>
</tr>
<tr>
<td>Red</td>
<td>&gt;50000</td>
</tr>
<tr>
<td>White</td>
<td>– No data</td>
</tr>
</tbody>
</table>
Example 2: Investments in urban transit/walking/cycling not always monitored:

World Bank tracking of urban transit, cycling and pedestrian investments is folded into “general transportation”
Example 3: Standard CBA models for roads & fail to consider transit alternatives

WB highway development and management CBA model (HDM-4) considers a limited set of health and environmental risks but not the benefits of alternative, transit-oriented investments.
Example 4: Jobs & poverty reduction benefits from transit also largely ignored

‘Investment in public transport and rapid transit may be a more effective means of generating stable local jobs and more economic value-added’ than road-building because:

- Transit creates long-term jobs
- A greater share of transit’s total economic investment is allocated to salaries & operations, as compared to imports of vehicles & fuels
- Transit increases access of disadvantaged groups to employment centres and can lower their travel costs
Lack of data and awareness contributes to a 'vicious cycle' of bad decisions & health impacts

More vehicles = more road space/construction for vehicles = greater air pollution, noise and physical activity risks

Hanoi, 1993

Hanoi, 2001

Hanoi, 2002
Vicious cycle: Injury and Physical Inactivity

Increased traffic injury risks

More children are physically inactive and obese

Parents drive their children to school by car

Traffic increases

Streets are even more dangerous
MUSTER THE PRESTIGE AND “BRAND” RECOGNITION OF WHO, CCAC and UNEP TO MOBILIZE AWARENESS & ACTIONS
Target Audiences

CLEAN AIR MATTERS TO ME
Target Audiences

• City and regional governments - BreatheLife network
• General Public – social-media users; parents concerned about children’s health; students
• Health sector - “Influencers such as specialists in cardiovascular and lung health & cancer treatment
ACTICS

- Authoritative Air Quality evidence
- Infographics made complex data simple
- Videos & exhibits—emotional story
- Global-Regional-Local campaigning - to amplify the story
AIR POLLUTION IS AN INVISIBLE KILLER

How safe is the air in your city? See the results:
THE AIR POLLUTION IN
MOROGORO, THE
UNITED REPUBLIC OF
TANZANIA

Air Quality in The United Republic of Tanzania

41,221 Annual Deaths from air pollution

Outdoor
AIR POLLUTION
Air Quality
22 annual average PM 2.5.

Indoor
AIR POLLUTION
Child Deaths
9720 per year.
SHAREABLE INFOGRAPHICS

THE INVISIBLE KILLER
Air pollution may not always be visible, but it can be deadly.

36% OF DEATHS FROM LUNG CANCER
34% OF DEATHS FROM STROKE
27% OF DEATHS FROM HEART DISEASE

BREATHE LIFE.
Clean Air. Healthy Future.

How air pollution impacts your body
Posted by World Health Organization (WHO)
58,957 Views

They weave clots that can be deadly blockers of blood flow
BreatheLife Cities
At launch: 12 cities announced intention to join

PROMOTING EVERY CITY’S STORY

LONDON JOINS BREATHELIFE CAMPAIGN: MAYOR SADIQ KHAN ANNOUNCES ON 4 OCTOBER

National Government of Mongolia
Joined September 13, 2017

Washington D.C., United States
Joined September 22, 2017

Hualqui, Chile
Joined April 22, 2017

Concepción, Chile
Joined April 22, 2017

Chiguayante, Chile
Joined April 22, 2017

Greater Manchester, United Kingdom
Joined April 3, 2017

SINGAPORE FIRST SOUTHEAST ASIAN CITY TO JOIN BREATHELIFE CAMPAIGN:
CAMPAIGN WAY FORWARD

Policymakers

Health sector

Public - Parents
WAY FORWARD

• “BREATHELIFE” REGIONAL HUBS IN ASIA, AFRICA, AMERICAS

• HEALTH SECTOR / HIAP OUTREACH - CARDIO, PULMONARY & CANCER SPECIALISTS

• PUBLIC OUTREACH WITH PARTNERS IN KEY CITIES
  • SCHOOLS
  • SOCIAL MEDIA
  • EVENTS
  • BREATHELIFE CHALLENGES
Regional Video Content/Languages
EVENTS FOR POLICYMAKERS & PUBLIC

• COP 21, Paris 2015
• Habitat III, Quito 2016
• World Urban Forum – Kuala Lumpur 2018
BREATHE LIFE
Clean Air. Healthy Future.
Three major regional campaigns have been announced in Africa, each targeting the reduction of emissions from cars.

**Regional Campaigns:**

1. **African Countries Progressing Towards Cleaner Car Imports**: This campaign aims to phase out old and inefficient vehicles, encouraging the uptake of cleaner alternatives.

2. **Nine African Cities Pledge to Become “Zero Emission” by 2050**: Nine cities—Accra in Ghana, Dar es Salaam in Tanzania, Addis Ababa in Ethiopia, Lagos in Nigeria, Dakar in Senegal, and Durban, Johannesburg, and Cape Town in South Africa—have committed to becoming zero-emission cities by 2050. This initiative focuses on the development of sustainable transport systems, including electric vehicles and public transport systems.

3. **Breathelife**: This campaign emphasizes the importance of clean air and supports initiatives that promote environmental sustainability in African cities. It advocates for the implementation of policies and practices that reduce air pollution and improve public health.

These campaigns reflect a growing awareness of the need to address climate change and environmental degradation in Africa, with a focus on sustainable development and improved public health outcomes.