

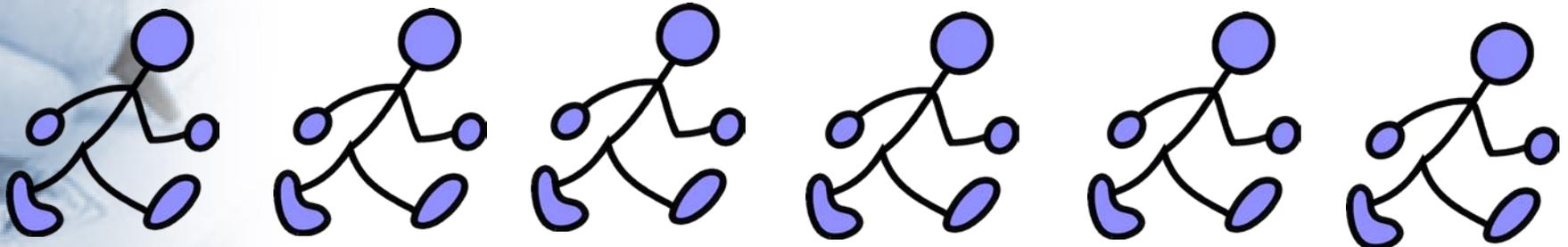


# Walking is the good news story for physical activity and health... and for liveable cities

Professor Nanette Mutrie MBE  
Director of Physical Activity for Health Research Centre  
[PAHRC]

University of Edinburgh

[www.ed.ac.uk/education/pahrc](http://www.ed.ac.uk/education/pahrc)





# **The Toronto Charter for Physical Activity: A Global Call for Action**

**Launched Toronto April 2010**

**International Congress Physical  
Activity for Health**

**Led by Professor Fiona Bull**

**Chair, Global Advocacy for Physical Activity, ISPAH**



**THE UNIVERSITY OF  
WESTERN AUSTRALIA**



**GLOBAL ADVOCACY  
FOR PHYSICAL ACTIVITY**  
Advocacy Council of ISPAH

- Physical inactivity has reached 'Pandemic' proportions
- Interventions are needed!
- July 2012

# THE LANCET

Physical Activity · July, 2012

[www.thelancet.com](http://www.thelancet.com)



"In view of the prevalence, global reach, and health effect of physical inactivity, the issue should be appropriately described as pandemic, with far-reaching health, economic, environmental, and social consequences."



# Regular physical activity reduces risk of:

- All-cause mortality
- Coronary heart disease
- High blood pressure
- Stroke
- Falling
- Metabolic syndrome
- Type 2 diabetes
- Breast cancer
- Colon cancer
- Depression



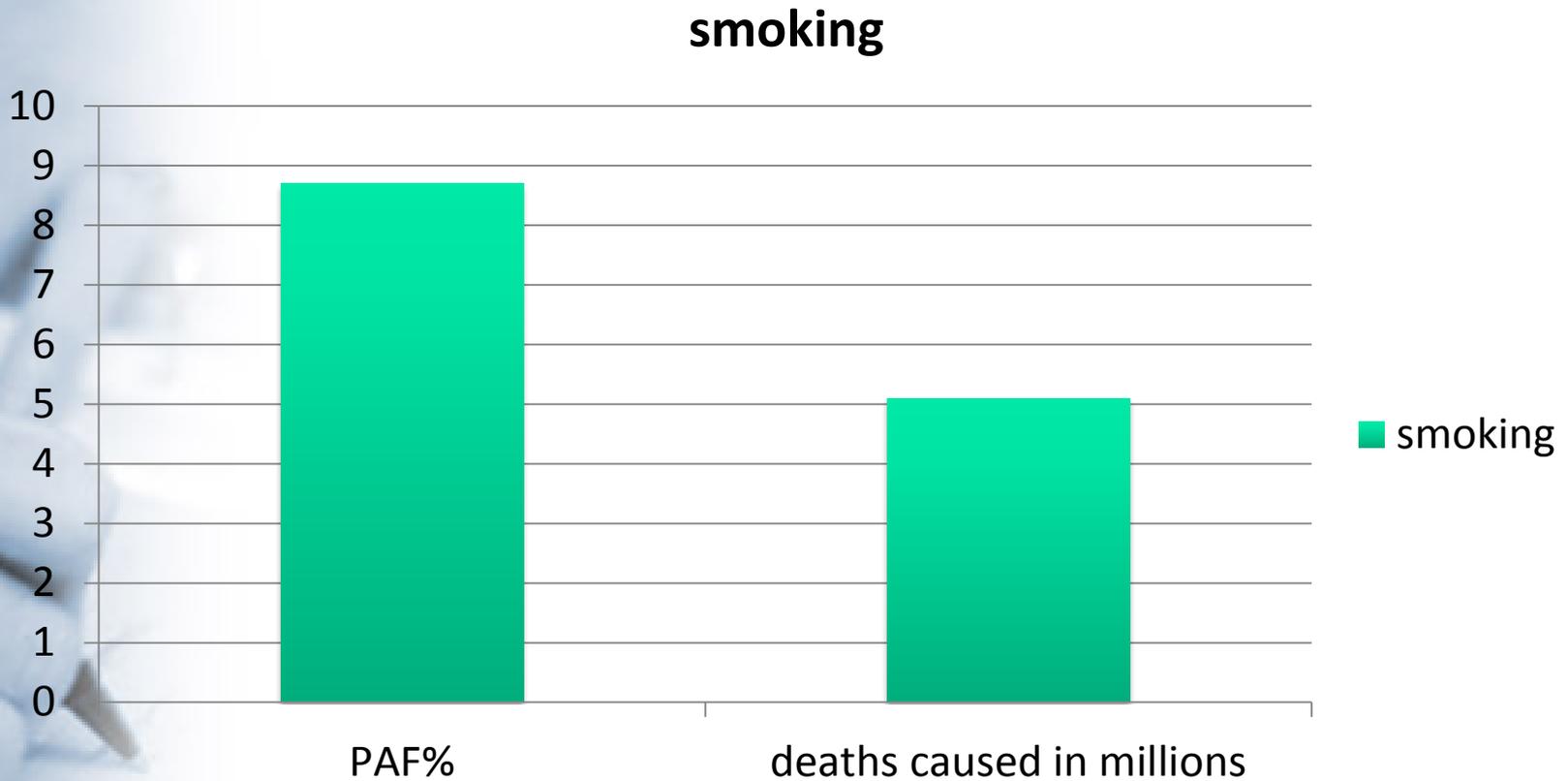
# **Strong evidence of the following benefits for adults:**

- Increased cardiorespiratory and muscular fitness
- Healthier body mass and composition
- Improved bone health
- Increased functional health
- Improved cognitive function

Lee et al. , Lancet, July 2012

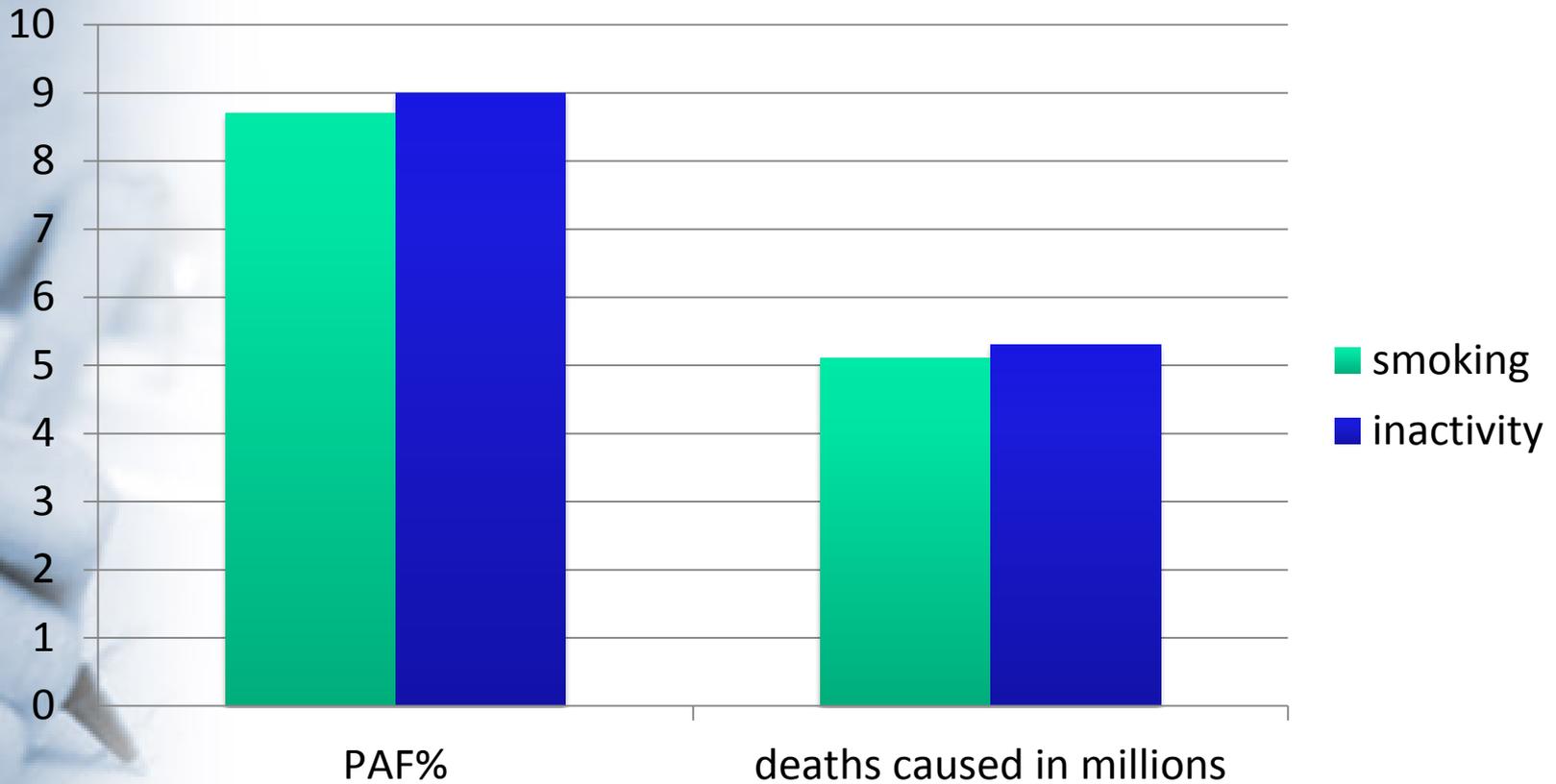


# How does the risk of inactivity compare with smoking?





# How does the risk of inactivity compare with smoking?





# Public health guidelines on Physical Activity

CMOs 2011 'start active stay active'

- 150 mins of moderate activity/week
  - or 75 mins vigorous intensity per week
  - or combination
- Strength exercise at least two days/week
- Older adults all of above plus
  - balance and co-ordination  
2/days/week
- Limit sedentary behaviour

# 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!

## Vision: A More Active Scotland

Physical activity is about getting people moving. Daily walking, playing in a park, going to a gym, training with a team or aspiring to win a gold medal - it really doesn't matter how people get active, it just matters that we do.

Being physically active contributes to our personal, community and national wellbeing.

Our vision is of a Scotland where more people are more active, more often.

## National Outcomes

Business	Employment	Research and Innovation	Young People	Early Years	Healthier	Inequalities Tackled	Life Chances
Safe from Crime	Sustainable Places	Resilient Communities	Environment Valued	National Identity	Impact on Environment	Older People Supported	Public Services

## Active Scotland Outcomes

We encourage and enable the inactive to be more active	We encourage and enable the active to stay active throughout life	We develop physical confidence and competence from the earliest age
We improve our active infrastructure – people and places	We support wellbeing and resilience in communities through physical activity and sport	We improve opportunities to participate, progress and achieve in sport

**Equality: Our commitment to equality underpins everything we do**

<http://www.gov.scot/Topics/ArtsCultureSport/Sport/Outcomes-Framework>

## Vision: A More Active Scotland – Trends (2015)

% adults who meet MVPA guidelines (63%)



% children who meet MVPA guidelines (76%)



### Inactive to active

% inactive adults (22%)



% inactive children (9%)



% Recreational Walking (64%)



### Stay active

% active on 15+ days per month (48%)



% of active older people (57%)



Visits per 1,000 of population to leisure facilities (10.008)



### Start out active

School PE provision (98%)



Children's active play (53%)



Active travel to school (50%)

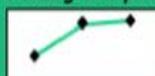


### People and places

% satisfied with leisure facilities (52%)



% with 5 min greenspace access (69%)

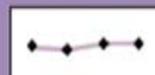


% engaged in 'active' volunteering (4%)



### Sport for change

Community safety for play (80%)



% feel safe walking in neighbourhood (72%)



### Sports participation

Adult participation (51%)



Child participation (67%)



Team Scotland CWG medals (53)



<http://www.gov.scot/Topics/ArtsCultureSport/Sport/Outcomes-Framework/Dashboard>



# 7 Investments that work for physical activity

1. **‘Whole-of-school’** programs
2. **Transport policies** and systems that prioritise walking, cycling and public transport
3. **Urban design** regulations and infrastructure that provides for equitable and safe access for recreational physical activity, and recreational and transport-related walking and cycling across the life course
4. Physical activity and NCD prevention integrated into **primary health care** systems
5. **Public education**, including mass media to raise awareness and change social norms on physical activity
6. **Community-wide programs** involving multiple settings and sectors & that mobilize and integrate community engagement and resources
7. Sports systems and programs that promote **‘sport for all’** and encourage participation across the life span



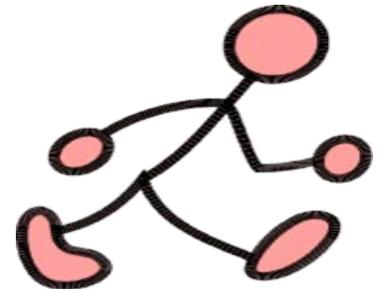
# The ABC of Physical Activity for Health: A consensus statement from the British Association of Sport and Exercise Sciences BASES Journal of Sport Sciences 2010

- A- all adults; B- beginners; C-conditioned
- Beginners
  - Something is better than nothing
  - Set achievable goals
  - Find enjoyment
  - Seek support



# For almost everyone the best place to start is to increase walking

- 1) Walking is the easiest mode of activity for inactive people :
  - ◆ to get started with
  - ◆ to sustain
- 2) Confers all the major benefits of activity
- 3) Can be done for transport or recreation



# WALK

YOUR WAY TO BETTER HEALTH

## Anatomy OF Walking

**BOOSTS ENDORPHINS**  
EASING STRESS, TENSION, ANGER,  
FATIGUE, AND CONFUSION  
IN TEN MINUTES

**REDUCES**  
GLAUCOMA RISK

**HALVES**  
ALZHEIMER'S DISEASE RISK  
OVER 5 YEARS

**LIMITS SICKNESS**  
BY HALVING ODDS OF CATCHING A COLD

**IMPROVES HEART HEALTH**  
BY INCREASING HEART RATE  
AND CIRCULATION

**WORKS**  
ARM &  
SHOULDER  
MUSCLES

**ENGAGES**  
AB MUSCLES

**IMPROVES**  
BLOOD  
PRESSURE  
BY FIVE POINTS

**BUILDS BONE MASS,**  
REDUCING RISK OF  
OSTEOPOROSIS

**LIMITS COLON CANCER**  
BY 31% FOR WOMEN

**STRENGTHENS LEGS,**  
INCLUDING QUADRICEPS,  
HIP FLEXORS, AND HAMSTRINGS

**IMPROVES BALANCE**  
PREVENTING FALLS

**BURNS**  
MORE FAT  
THAN JOGGING

ONLY 30 MINUTES A DAY,  
5 TIMES A WEEK CAN MAKE YOU  
HEALTHIER AND HAPPIER.



# Walking and mental health

- ↓ symptoms of anxiety and stress
- ↓ symptoms of depression
  - ↓ cognitive decline among older people
- ↑ self-reported energy levels
- ↑ affective response

- ↔ with better cognitive performance at school

↑ the cognitive functioning of older adults

↑ size of the hippocampus and prefrontal cortex

↑ sleep quality



# ***Let's Get Scotland Walking -***

- National Walking Strategy (NWS) published in 2014
- Is a key step in the delivery of the National Physical Activity Implementation Plan (NPAIP): *Building a Legacy from the Commonwealth Games.*
- Sits within the context of the Active Scotland Outcomes Framework



# Help make Scotland a 'walking friendly' country

- <http://www.stepchangescot.scot>
- We want people to walk more everyday - to work, to school, for health and wellbeing, to enjoy the outdoors and just for fun!

# A Step Change for Scotland

**TRAVEL**  
Encourage walking for short journeys and as a key part of multi-mode trips

**EDUCATION**  
Implement safer routes to nurseries, schools, colleges and universities to encourage daily walking

**WALKING FOR HEALTH**  
Offer free community walking programmes supported by trained volunteers

**GREEN INFRASTRUCTURE**  
Enable easier access to parks, greenspaces and wider countryside for everyone

**LOCAL ECONOMIES**  
Supporting economic activities, including tourism, through improved walking opportunities

**PATH NETWORKS**  
Provide good quality, maintained multi-use path networks in and around communities

**HEALTH & SOCIAL CARE**  
Promote the benefits of walking for mental and physical wellbeing

**AIR QUALITY**  
More people walking and cycling will help reduce air pollution.  
*It's not far, leave the car*

**BUILT ENVIRONMENT**  
Design our towns and cities to be walkable, safe, attractive, and sustainable

**WORKPLACE**  
Promote walking as an important part of the working day

**EVERYONE, EVERYWHERE**  
Walking is free, fun, healthy and for everyday journeys

**Let's Get Scotland Walking**

Everyone can help make Scotland a 'walking friendly' country.  
#stepchangescot [www.stepchangescot.scot](http://www.stepchangescot.scot)



**healthier  
scotland**  
SCOTTISH GOVERNMENT



# This looks Liveable!

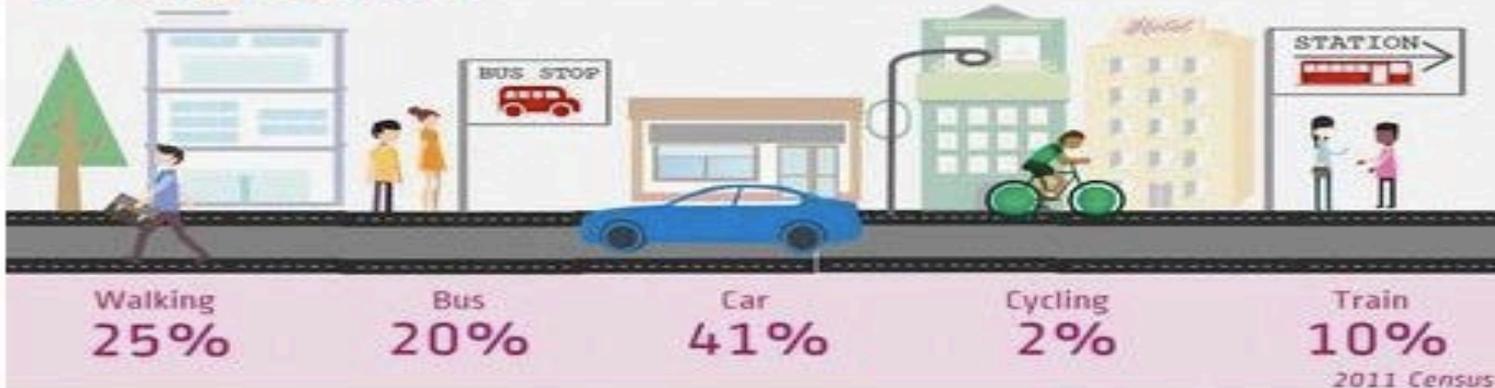
- Walkability
- Sustainable transport
- Use of green spaces
- Safe social spaces

See what makes a city liveable

- <http://www.livablecities.org/blog/new-report-89-defining-livable-cities>

# HOW DOES GLASGOW GET AROUND?

## Getting to work



**57%** of school children in the city get to school using an active travel method.

Walking accounts for **53%** while a few students cycle [3%] and skate/scooter [1%] to school.



## Getting to school

However, Glasgow has the highest proportion of pupils who are driven or drive to school among the four largest Scottish cities.

**31%**

## Licensed vehicles, casualties and deprivation

The number of licensed, motorised vehicles in Scotland has doubled from **1.3 million** in 1975

to **2.7 million** in 2012.



Road accident casualties have been generally reducing over time...

...but pedestrian casualties remain **3 times** higher in the most deprived areas compared to the least deprived.



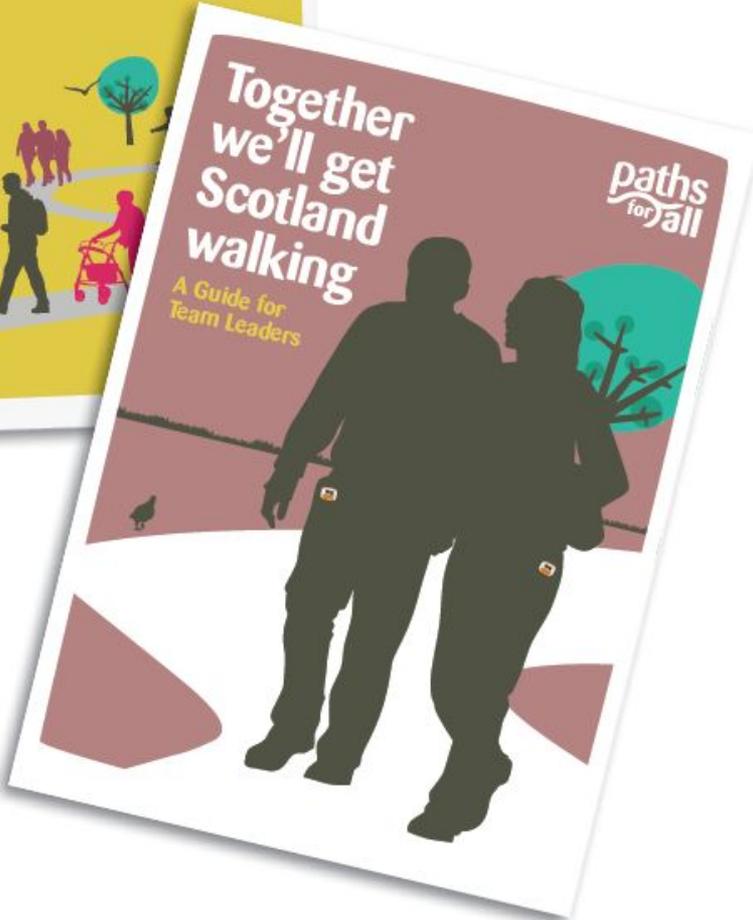
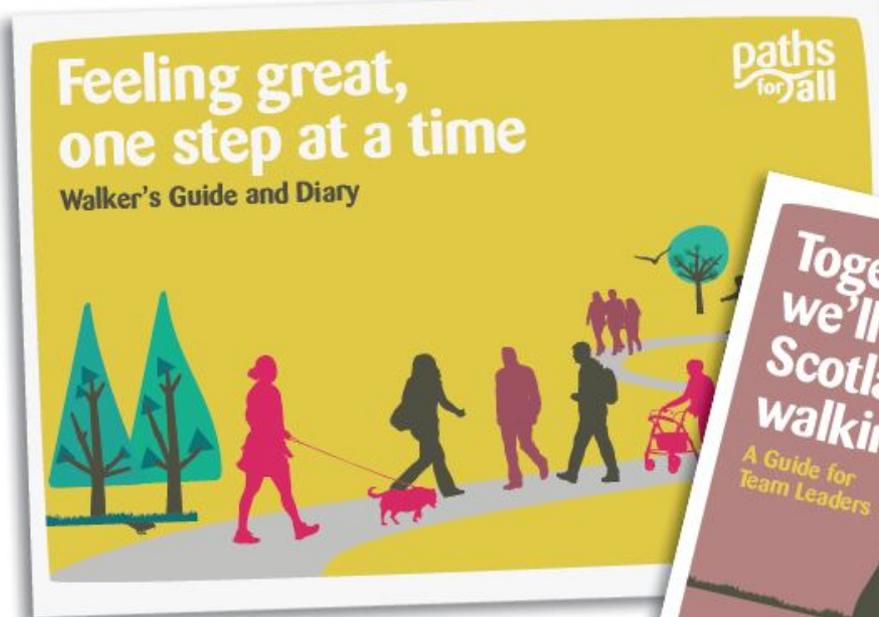
Find out more:

[www.pathsforall.org.uk](http://www.pathsforall.org.uk)

Find a Health Walk near you:

[www.pathsforall.org.uk/findahealthwalk](http://www.pathsforall.org.uk/findahealthwalk)

# Community Pedometer Pack







# Conclusions

- Walking provides the best bet for encouraging people to be active for health and happiness
- Active travel to school [walking and cycling] is static and needs further promotional efforts [environment + education + behaviour change]

# Discussion and question time

- Stand up – if you would like to- and discuss with neighbour
- What this has made you think about
- Is there a question you want to ask?

