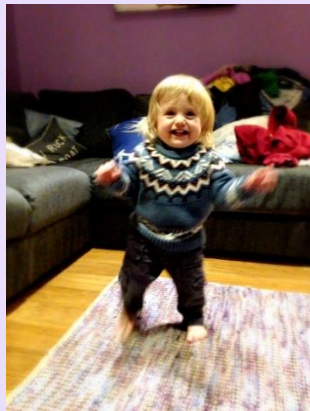


Physical Activity in Children and Young People

What do we mean?



‘Begin with the end in mind’

Steven Covey, 1989

- In an ideal world – children and young people meet (or exceed) guidelines on physical activity
- Reap the benefits of an active life: mental and physical
- Minimise the costs of inactive and of a sedentary life: e.g. type II diabetes, depression, stroke, obesity

Public Health England, 2014



First – definitions

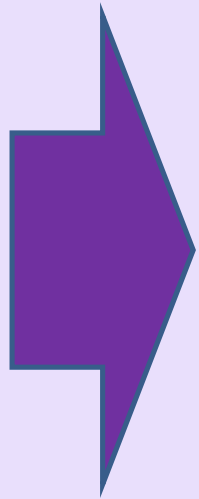
- **‘Physical activity’**: ‘any bodily movement produced by skeletal muscles that requires energy expenditure’. (WHO, 2010)
- **‘Exercise’**: ‘subcategory of physical activity – ‘planned, structured, repetitive and purposeful, in the sense that the improvement or maintenance of one or more components of physical fitness is the objective.’ (WHO, 2010)



- **‘Moderate intensity physical activity’:**
 - RPE (Rate Perceived Exertion Scale) = 5-6/10
 - Will make your heart beat faster, make you breathe faster, make you feel warmer
 - You can still talk, but cannot sing the words to a song (DOH, 2011)

- **‘Vigorous intensity physical activity’:**
 - RPE (Rate Perceived Exertion Scale) = 7-8/10
 - Will make your heart beat rapidly, make you breathe hard and fast, make you feel warmer
 - You will have difficulty holding a conversation (DOH, 2011)





My number...	My face...	This is what I may be thinking....	This is what my body may be doing....
1		This exercise is the same as resting.	I am getting ready to exercise, but I don't feel different yet.
2		This exercise isn't hard.	I am getting a little warm. I can still talk normally.
3		I am just beginning to feel like I am exercising.	I am feeling like my body is warming up.
4		I am starting to feel like I am exercising. I feel good!	I can almost talk in a regular voice, but it is getting harder.
5		This exercise is a good workout! I am really working hard.	My cheeks are getting pink. I am getting a little sweaty.
6		I am exercising more than I thought. It is getting hard to do.	I feel like talking is getting harder. I have to stop sometimes for air.
7		This is pretty hard. I can exercise a little bit longer, then I'll stop.	I am getting really sweaty. My body is hot!
8		This exercise is really hard, but I'm not ready to quit.	I can talk a little, but not too much.
9		I need a break from this very hard exercise.	My face looks red. I feel like I need to stop.
10		I'm exercising too much! My body is making me stop now!	My heart is beating very fast and strong. I can't talk.



'Physical Inactivity': wide range of definitions

'Inactive'

- (Age 2-4) included as 'low activity'
- (Age 5-15) included as 'low activity'
- (Age 16+) < 30 mins each week (moderate intensity)

'Low activity'

- Age 2-4) < 60 mins each day
- (Age 5-15) < 30 mins each day
- (Age 16+) 30-59 mins each week (moderate intensity)

'Some activity'

- (Age 2-4) 60-179 mins each day
- (Age 5-15) 30-59 mins each day
- (Age 16+) 60-149 mins each week (moderate intensity)

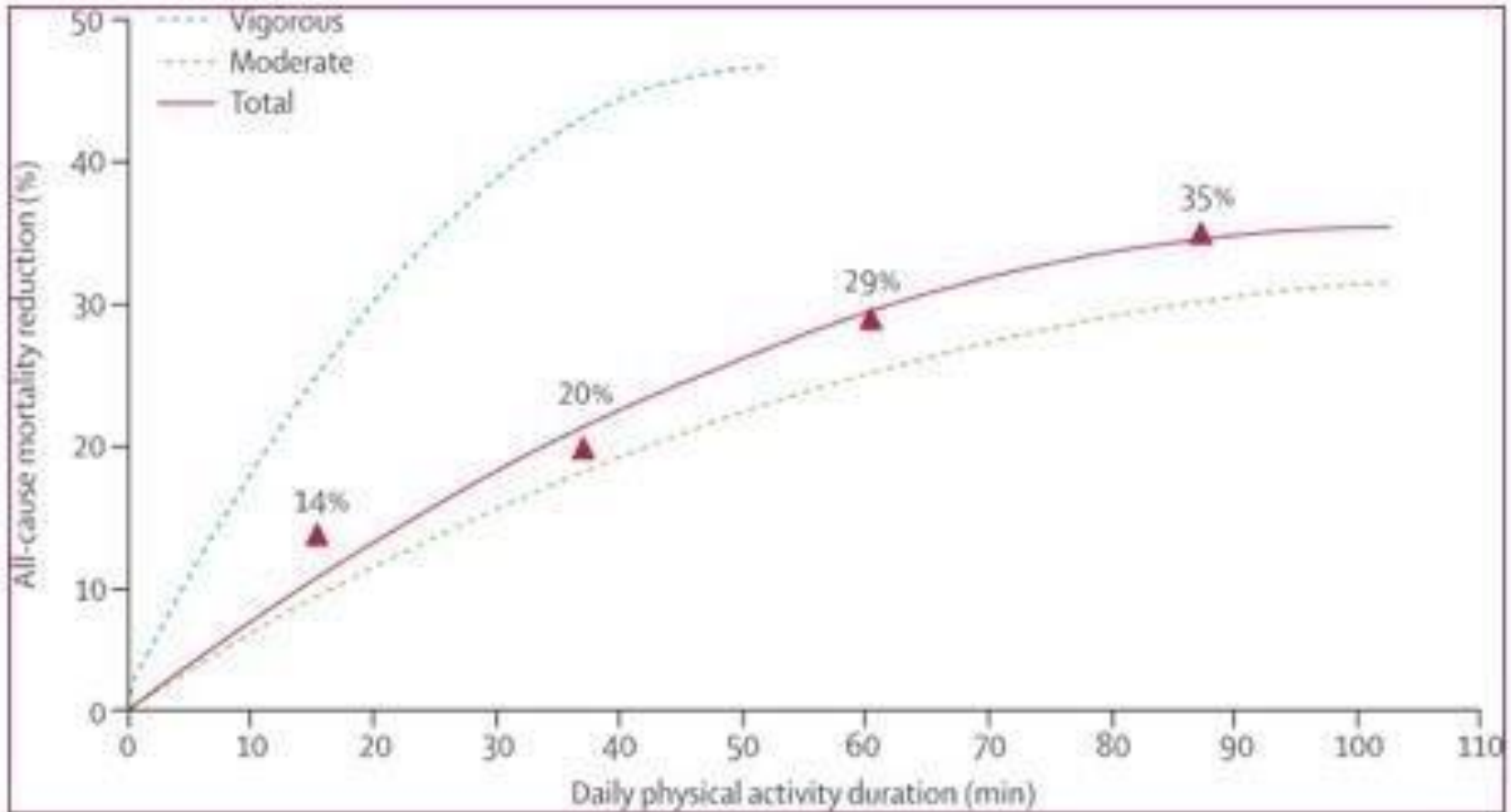
'Active'

- Meets the recommended guidelines



Effect of physical activity on all-cause mortality

Wen et al, Lancet, 2011



- ‘**Sedentary behaviour**’: a group of behaviours that occur whilst sitting or lying down while awake and typically require very low energy expenditure.’ (Pate et al, 2008)



- Interventions targeted at low activity *and* sedentary, if successful, produce greatest health gain



Second - guidelines

WHO, 2010

- No under 5s
- No sedentary

Canada, 2011

- Across life course
- Split C and YP
- Guidance on duration of CYP sedentary
- No adult sedentary
- Benefits of additional PA

UK, 2011

- Across life course
- No split C and YP
- No guidance on duration of sedentary
- Limited reference to benefits of additional PA



Guidelines – physical activity

- **Not yet able to walk**

Encourage physical activity from birth (particularly floor- and water-based activities). More the better.

- **Able to walk unaided**

Physically active for 180 minutes spread throughout the day. More the better.

- **Age 5-18**

At least 60 mins a day of moderate to vigorous intensity physical activity. Vigorous intensity (including muscle & bone-strengthening) 3 times a week. More the better.



Guidelines – sedentary behaviour

- **Under 5s**

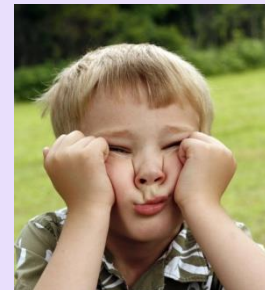
Minimise time being sedentary (being restrained or sitting). Suggested times – **maximum 1** hour at a time.

- **Age 5-18**

Minimise the time being sedentary. Suggested times – **maximum 2 hours** of non-work screen time a day (even less, even better).



What's next?



- Turn 'dry' guidelines into **engaging format**
- Social marketing exercise
- Positive, '**gain-framed**'-approach
- Different language for different ages
- All **key influencers** can play a part: feedback today



Physical activity for children and young people (5 – 18 Years)



BUILDS
CONFIDENCE &
SOCIAL SKILLS



DEVELOPS
CO-ORDINATION



IMPROVES
CONCENTRATION
& LEARNING



STRENGTHENS
MUSCLES
& BONES



IMPROVES
HEALTH
& FITNESS



MAINTAINS
HEALTHY
WEIGHT



IMPROVES
SLEEP



MAKES
YOU FEEL
GOOD

Be physically active

Spread activity
throughout
the day

All activities
should make you
breathe faster
& feel warmer



PLAY



RUN/WALK



BIKE



ACTIVE TRAVEL



SWIM



SKATE

Include muscle
and bone
strengthening
activities

3 TIMES
PER
WEEK



SPORT



PE



SKIP



CLIMB



WORKOUT



DANCE

Sit less



LOUNGING

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



Canadian 24 hour movement guidelines, 2016

GUIDELINES

For optimal health benefits, children and youth (aged 5–17 years) should achieve high levels of physical activity, low levels of sedentary behaviour, and sufficient sleep each day.

A healthy 24 hours includes:



SWEAT

MODERATE TO VIGOROUS PHYSICAL ACTIVITY

An accumulation of at least 60 minutes per day of moderate to vigorous physical activity involving a variety of aerobic activities. Vigorous physical activities, and muscle and bone strengthening activities should each be incorporated at least 3 days per week;

STEP

LIGHT PHYSICAL ACTIVITY

Several hours of a variety of structured and unstructured light physical activities;

SLEEP

SLEEP

Uninterrupted 9 to 11 hours of sleep per night for those aged 5–13 years and 8 to 10 hours per night for those aged 14–17 years, with consistent bed and wake-up times;

SIT

SEDENTARY BEHAVIOUR

No more than 2 hours per day of recreational screen time; Limited sitting for extended periods.



End goal

- Using:
 - **consistent** definitions and guidelines
 - relevant and consistent language
- In:
 - promotion
 - provision
 - monitoring of physical activity
- Provides:
 - An end **goal** to work towards & **benchmark** to measure against.

