

**UPDATE:**

**UK CMOs Physical Activity Guidelines 2019**

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**RNOH**  
**Fri Afternoon**  
**Rheum Radiology Meeting**

**13<sup>th</sup> Dec 2019**

**Overview**

- \* New CMOs Physical Activity Guidelines 2019
- \* Launched Sept 2019
- \* Updates previous guidance from 2011



**UK Chief Medical Officers' Physical Activity Guidelines**

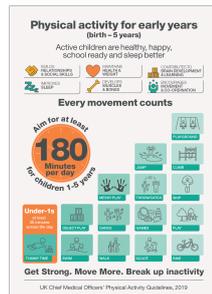
Published 7 September 2019

The screenshot shows the GOV.UK website interface. At the top, there is a search bar and navigation links for 'Departments', 'Worldwide Consultations', 'Statistics', 'How government works', and 'Get involved News and communications'. The main heading is 'Physical activity guidelines: UK Chief Medical Officers' report'. Below the heading, a summary states: 'A report from the Chief Medical Officers in the UK on the amount and type of physical activity people should be doing to improve their health.' It also includes publication details: 'Published 7 September 2019', 'Last updated 19 September 2019', and 'From: Department of Health and Social Care'. There are three main sections: 'Documents' featuring a PDF icon and the title 'UK Chief Medical Officers' physical activity guidelines' (PDF, 4.47MB, 66 pages); 'Details' with a brief description: 'The report contains guidance for health professionals, policymakers and others working to promote physical activity, sport and exercise for health benefits.'; and 'Related content' with links to 'Physical activity guidelines', 'Everybody active every day framework for physical activity', 'Physical activity guidelines: infographics', and a 'Collection' of 'Physical activity guidelines'.

**Foreword**

- \* **CMOs England, Wales, Northern Ireland, Scotland:**
- \* 'In 2010, we were among the first Nations in the world to set out the evidence for how much and what kinds of physical activity we need to do to keep ourselves healthy.'
- \* Since then, the evidence has become more compelling and the message is clear: **"If physical activity were a drug, we would refer to it as a miracle cure, due to the great many illnesses it can prevent and help treat".....**

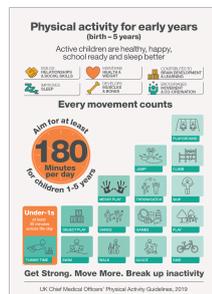
# 1. Physical activity for early-years: birth-to-5



- \* Once mobile, aim for at least 3 hours a day of varied activity, including outdoor play.
- \* Prior to that (under 1 year), at least 30 min 'tummy time' each day

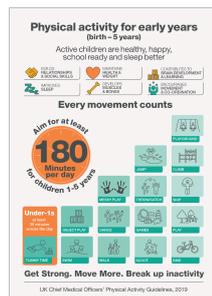
# 1. Physical activity for early-years: birth-to-5

## Advantages-



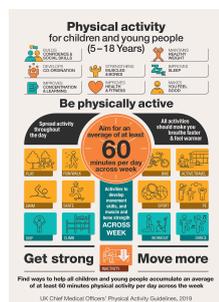
- \* Builds relationships & social skills.
- \* Maintains health & weight.
- \* Contributes to brain development & learning.

## 1. Physical activity for early-years: birth-to-5



- \* Improves sleep.
- \* Develops muscles & bones.
- \* Encourages movement & co-ordination.

## 2. Physical activity for children and- young people: 5 to 18 years



- \* Same guidance as previously.
- \* Be active daily, aim for minimum of 60 minutes moderate to vigorous (high) intensity activity.
- \* Develop CV fitness, movement skills, muscle fitness, muscle and bone strength.

## Exercise intensity

- \* **Low Intensity:**

- \* About level **3-5** on the Perceived Exertion Scale.
- \* You might work at this intensity when warming up or doing a longer workout, e.g. a long bike ride, walk or run.
- \* Might also be an intensity you work at if you take walks throughout the day.

- \* **Moderate Intensity:**

- \* About level **5-7** on the Perceived Exertion Scale.
- \* Getting on a cardio machine or going for a run and being at that stage where you can talk, but only a few words.

- \* **High Intensity:**

- \* About level **7-9** on the Perceived Exertion Scale
- \* A level you can only work at for short periods of time.
- \* You might work at this intensity when doing HIIT.

## Target Heart Rate

- \* The American Heart Association (AHA) recommends a target heart rate (THR) of:
- \* **Moderate exercise intensity: 50% to about 70%** of your maximum heart rate (MHR).
- \* **Vigorous/ high exercise intensity: 70% to about 85%** of your maximum heart rate.
- \* To calculate **MHR**=  $(220 - \text{age in years}) = \underline{\hspace{2cm}}$  bpm

# Talk test

- \* **Measuring exercise intensity using the 'Talk test'**
- \* The talk test is a simple and reliable way to measure intensity.
- \* **Rule of thumb:**
- \* *If you can talk and sing without puffing at all, you're exercising at a **low intensity**.*
- \* *If you can comfortably talk, but not sing, you're exercising at **moderate intensity** activity.*
- \* *If you cannot say more than a few words without gasping for breath, you're exercising at a **high intensity**.*
- \*

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*Curr Opin Cardiol.* 2014 Sep;29(5):475-80. doi: 10.1097/HCO.0000000000000097.

**The talk test: a useful tool for prescribing and monitoring exercise intensity.**

Reed JL<sup>1</sup>, Pipe AL.

Author Information

**Abstract**

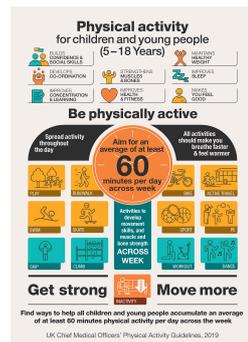
**PURPOSE OF REVIEW:** This review focuses on recent literature examining the validity and reliability of the talk test for prescribing and monitoring exercise intensity. The utility of the talk test for high-intensity interval training and recently proposed exercise training guidelines for patients with atrial fibrillation is also examined.

**RECENT FINDINGS:** In healthy adults and patients with cardiovascular disease, comfortable speech is likely possible (equivocal or last positive talk test stage) when exercise intensity is below the ventilatory or lactate threshold, and not likely possible (negative talk test stage) when exercise intensity exceeds the ventilatory or lactate threshold. The talk test can be used to produce exercise intensities (moderate-to-vigorous intensity, 40-80% (Equation is included in full-text article.)) within accepted Canadian Association of Cardiovascular Prevention and Rehabilitation and American College of Sports Medicine guidelines for exercise training, to monitor exercise training for patients with atrial fibrillation, and help avoid exertional ischemia. The talk test has been shown to be consistent across various modes of exercise (i.e., walking, jogging, cycling, elliptical trainer and stair stepper). It may not be practical for high-intensity interval training.

**SUMMARY:** The talk test is a valid, reliable, practical and inexpensive tool for prescribing and monitoring exercise intensity in competitive athletes, healthy active adults and patients with cardiovascular disease. Healthcare professionals should feel comfortable in advocating its use in a variety of clinical and health-promotion settings.

PMID: 25010379 DOI: 10.1097/HCO.0000000000000097  
[Indexed for MEDLINE]

## 2. Physical activity for children and young people: 5 to 18 years



- \* Builds confidence & social skills.
- \* Develops co-ordination.
- \* Improves concentration & learning.
- \* Strengthens muscles & bones.

## 2. Physical activity for children and young people: 5 to 18 years



- \* Improves health & fitness.
- \* Maintains healthy weight.
- \* Improves sleep.
- \* Improves wellbeing & mood.

### 3. Physical activity for adults and older adults



**ADULTS:**

- \* Any activity (vs NO activity) has benefits.
- \* **Moving from inactive to doing something gives greatest benefits.**
- \* New emphasis on resistance training.
- \* Minimum of 150 min moderate activity OR 75 min vigorous activity per week.
- \* Large body of evidence for high intensity interval training (HIIT) to support health benefits.

## www.nhs.uk

Examples of moderate intensity activities:

- brisk [walking](#)
- water aerobics
- [riding a bike](#)
- dancing
- doubles tennis
- pushing a lawn mower
- hiking
- rollerblading

Examples of vigorous activities:

- [jogging or running](#)
- [swimming fast](#)
- [riding a bike](#) fast or on hills
- walking up the stairs
- sports, like football, rugby, netball and hockey
- skipping rope
- aerobics
- gymnastics
- martial arts

Examples of very vigorous activities:

- lifting heavy weights
- circuit training
- sprinting up hills
- interval running
- running up stairs
- spinning classes

### 3. Physical activity for adults and older adults



**OLDER ADULTS (60-65 yrs & older):**

- \* Additional considerations of **strength & balance** activities.
- \* Balance activities should form part of at least 2 sessions a week.
- \* *Muscle strength declines from approximately age 30 years;*
- \* *Balance declines from approximately age 40 years.*

### 4. Physical activity for disabled adults



- \* Additional guidance not present in 2011 version.
- \* Disabled adults less likely to be physically active.
- \* More likely to have or develop chronic illnesses.

## 4. Physical activity for disabled adults



- \* Creates opportunities to meet new people and feel part of community.
- \* Improves mental health & quality of life.
- \* Strengthens muscles and bones.
- \* Increases independence.
- \* Helps maintain a healthy weight.

## 5. Physical activity for pregnant women



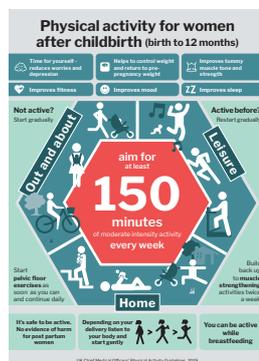
- \* Pregnancy a good time for behavioural change.
- \* Physical activity has many positive benefits for mother and baby.
- \* No evidence of harm.

## 5. Physical activity for pregnant women



- \* Helps control weight gain.
- \* Helps reduce high BP.
- \* Helps to prevent gestational diabetes.
- \* Improves mood.

## 6. Physical activity for women after childbirth: birth to 12 months



- \* Start pelvic floor exercises.
- \* Build up muscle strengthening to twice a week.
- \* No evidence of harm.

## 6. Physical activity for women after childbirth: birth to 12 months



- \* Time to themselves- Reduces worries and depression.
- \* Helps control weight and return to pre-pregnancy weight.
- \* Improves muscle tone & strength.
- \* Improves sleep & fitness.

## SIGNPOSTING →

### Moving Medicine:

[www.movingmedicine.ac.uk](http://www.movingmedicine.ac.uk)

#### 1. Pick a condition

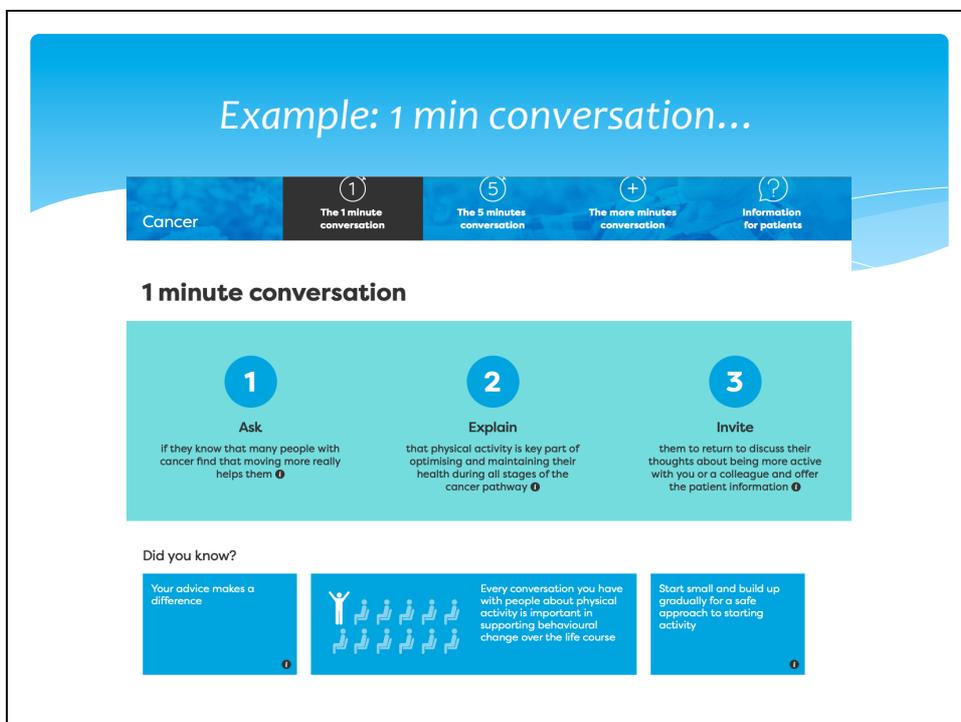
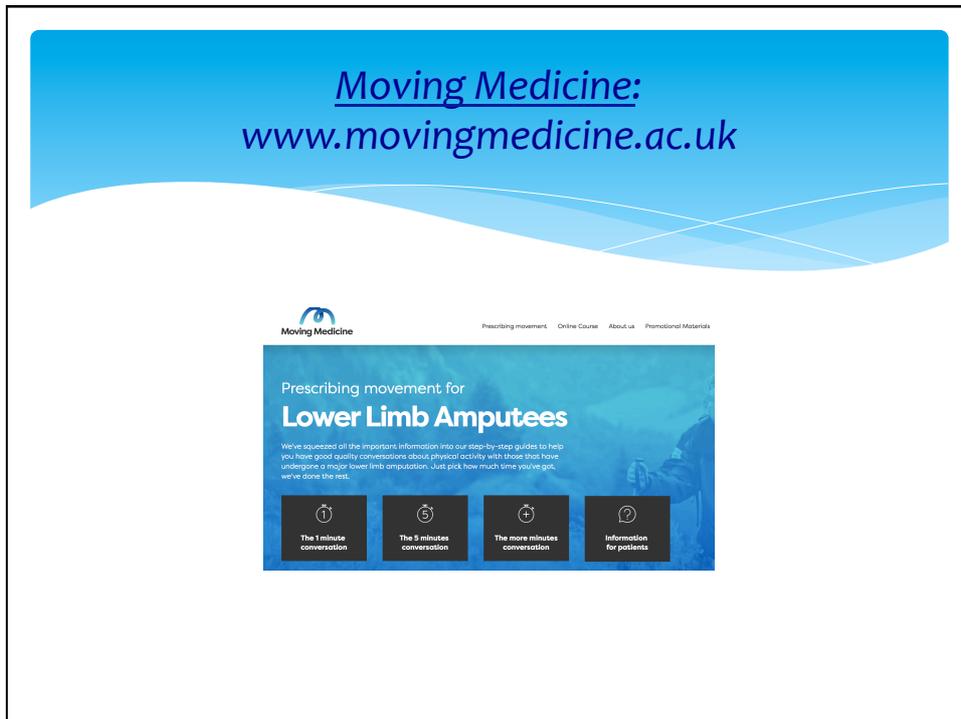
There are 10 toolkits, each tailored for specific conditions:

Cancer, COPD, Dementia, Depression, Falls and Frailty, Inflammatory Rheumatic Disease, Ischaemic Heart Disease, Musculoskeletal pain, Disease prevention and Type 2 Diabetes

#### 2. Choose by how much time you've got

Each toolkit is made up of 4 elements::

- The 1 minute conversation
- The 5 minutes conversation
- More minutes conversation
- Information for Patients



## THE END

*“Those who think they have not time for bodily exercise will sooner or later have to find time for illness.”*

Edward Stanley  
Bishop of Norwich (19<sup>th</sup> century)

Thank you

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