

Planning for Health in the East of England The Cambridge Belfry: 9<sup>th</sup> May 2018

# **Planning for Health**

Carl Petrokofsky, FFPH Specialist in Public Health Healthy Places team Public Health England





- Public Health England (PHE)
- Reflections on Health, Health Inequalities and Place
- What we know
- Getting into practice (Healthy Places programme)
- Concluding Thoughts

# Public Health England

PHE is the expert national public health agency that fulfils the Secretary of State's statutory duty to protect health and address inequalities, and executes his power to promote the health and wellbeing of the nation.

Our functions and the things we deliver to our stakeholders:



We do this through worldclass science, advocacy, partnerships, knowledge and intelligence, and the delivery of specialist public health services.



# Healthy People Healthy Places

The way we plan, design and manage the territory of places, spaces, facilities and buildings within our everyday community can have an impact on health, from either a positive and negative perspective (RCEP, 2007).



### **Our Vision:**

**Building a Healthy Community** 

A healthy community is a good place to grow up and grow old in. It is one which supports healthy behaviours and supports reductions in health inequalities.

It should enhance the physical and mental health of the community and, where appropriate, encourage active healthy lifestyles and healthy living environments for people of all ages (Source: National Planning Practice Guidance)





#### WHAT IS A 'HEALTHY' NEIGHBOURHOOD?



intographic developed for UK-GBC by PRP

# The way we design and build our towns can promote good health and wellbeing



- promote physical activity in everyday life (walking, cycling)
  - can help people maintain healthy weights
- facilitate easy access to healthy, affordable food
- Prevent injuries,
- Promote socially connected neighbourhoods,
- cleaner air
- economic development

Source: Improving the health of Londoners. Transport Action Plan. Transport for London. 2014



9

# **Health Inequalities**

Health inequalities are differences between people or groups due to social, geographical, biological or other factors. These differences have a huge impact, because they result in people who are worst off experiencing poorer health and shorter lives.

Some differences, such as ethnicity, may be fixed. Others are caused by social or geographical factors (also known as 'health inequities') and can be avoided or mitigated



# Health Inequalities in England

Life expectancy gap:

9.1 years

Healthy life expectancy gap:

18.7 years

Life expectancy gap: 7.2 years Health life expectancy gap: 19.1 years

Source: Most recent data from PHOF, showing gap between LSOAs in the most and least deprived deciles, 2013-15

### Public Health Inequalities in England (Females) England



ONS: Inequality in Health and Life Expectancies within Upper Tier Local Authorities: 2009 to 2013

# Image: Second stateObesity prevalence by deprivation decilePublic Health<br/>EnglandNational Child Measurement Programme 2016/17





# Inequalities in the built environment:

Feature	Most deprived areas	Least deprived areas
Density of fast food outlets	114.1 per 100,000 population	61.4 per 100,000 population
Overcrowded households	7.7%	3.4%
Households in fuel poverty	14.0%	8.1%

Source: Public Health Outcomes Framework, February 2018



# Inequalities in the natural environment

**Figure 10** Populations living in areas with, in relative terms, the least favourable environmental conditions, 2001–6

Figure 4.7 Percentage of population by social grade who visit a green space infrequently in a year, 2009



#### Percent of population



Source: Department for Environment, Food and Rural Affairs, Energy Savings Trust<sup>426</sup>

Source: The Marmot Review. Fair society, healthy lives. 2010



## Why Place Matters:

# **Evidence: Natural Environment**

### Direct health benefits from:

- Improved mental wellbeing
- Higher levels of physical activity
- Community cohesion
- Reduced social isolation

### Indirect health benefits from:



- Mitigating adverse impacts: air quality; noise; heat; flooding, climate change
- Helping people appreciation the importance of nature and the need to protect it for future generations

### Greater health benefits from environments that are:

• Biodiverse, clean, well maintained, safe, as well as those that are available in greater proximity and quantity

Refs: PHE. Local Action on Health Inequalities: Improving access to green spaces. 2014; Defra. Evidence Statement on the links between natural environments and human health. 2017



## 1. Green Space: What we know

- Green spaces associated with decrease in health complaints and improvements in mental health. Green spaces associated with lower levels of health inequalities
- the most affluent 20% of wards in England have 5 times the amount of parks or general green space compared with the most deprived 10% of wards
- people living in the most deprived areas are 10 times less likely to live in the greenest areas



# **Air Pollution: Health Impacts**

- The Public Health Outcomes Framework (PHOF) estimates an effect equivalent to roughly 25,000 deaths England attributable to anthropogenic particulate matter air pollution (This does not include Nitrogen Dioxide which is being reviewed)
- It estimated that 5.3 percent of all adult deaths in England are caused by long-term exposure to man-made particulate air pollution (Est range from 2.5% in rural areas – 8.8% in the most polluted London Boroughs1)

# Air pollution is the largest environmental risk associated with deaths each year.

### A Decent Home – at the Centre

A Safe, suitable, appropriate home can...





Promote Health and Wellbeing

Help Maintain Independence

#### For children and young people



Unhealthy homes increase the risk of

- respiratory illness
- poor infant weight gain
- poor diet
- emotional and mental health problems
- physical injury and poisoning
- domestic fires



Overcrowded homes increase the risk of

- behavioural and mental health problems
- meningitis
- respiratory illness
- tuberculosis
- physical injury
- tobacco harm



Precarious housing increases the risk of

- emotional, behavioural and mental health problems
- low birth weight
- missing immunisations

Underlying health issues can in turn raise the risk of being homeless or living in precarious housing

Homes for children and families

For children and young people

# Unhealthy, overcrowded and precarious housing negatively affect





life

chances



Underlying health issues can in turn raise the risk of being homeless or living in precarious housing

Homes for children and families



# Housing Standards and impacts

- 20% of homes in England are classified as **non-decent** (English Housing Survey 2014-15)
- Highest proportion of non-decent homes are within the private sector (29%);
- The health effects of poor housing disproportionately affect vulnerable people: (older people living isolated lives, the young, those without a support network and adults with disabilities)

# Image: Second Second

- Total cost to the NHS of poor housing is £1.4 billion per year
- *Wider societal costs 18.6bn* (including medical costs, lost education and employment opportunities)
- Costs of treating Single homeless people at least £85.6m p.a.
- "... if we could find £10 billion now to improve all of the 3.5 million 'poor' homes in England, this would save the NHS £1.4 billion in first year treatment costs alone. It is estimated that such an investment would pay for itself in just over seven years and then continue to accrue benefits into the future."

# Active Travel, Transport and Health -Physical activity & health



×

Public Health

England



# Physical activity

- Active travel (including travelling actively to and from public transport) is a key way in which people can build physical activity into their everyday lives
- The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a 'wonder drug' or 'miracle cure' Annual Report of the Chief Medical Officer, 2009
- Increasing levels of physical activity will impact positively on a wide range of medical conditions and reduce NHS and social care costs

Physical Activity contribution to reduction in risk of mortality and long term conditions					
Disease	Risk reduction	Strength of evidence			
Death	<b>20-35</b> %	Strong			
CHD and Stroke	<b>20-35</b> %	Strong			
Type 2 Diabetes	35-40%	Strong			
Colon Cancer	30-50%	Strong			
Breast Cancer	20%	Strong			
Hip Fracture	<b>36-68</b> %	Moderate			
Depression	<b>20-30</b> %	Moderate			
Hypertension	33%	Strong			
Alzheimer's Disease	<b>20-30</b> %	Moderate			
Functional limitation, elderly	30%	Strong			
Prevention of falls	30%	Strong			
Osteoarthritis disability	22-80%	Moderate			

# Public Health I. Why is active travel important?

- Physical inactivity directly contributes to one in six deaths in the UK and costs £7.4 billion a year to business and wider society
- The growth in road transport has been a major factor in reducing levels of physical activity and increasing obesity
- Short car trips (under 5 miles) are a prime area for switching to active travel and to public transport
- Health promoting transport systems are pro-business and support economic prosperity. They enable optimal travel to work with less congestion, collisions, pollution, and they support a healthier workforce

In the West Midlands it has been estimated that

If cycling was currently 5% of trips... Over 10 years it would prevent roughly:

- $\downarrow$  550 Type 2 Diabetes
- ↓ 1,675 Coronary Heart Disease
- $\downarrow$  625 Stroke
- $\downarrow$  125 Breast Cancer
- $\downarrow$  150 Colorectal Cancer
- ↓ 3,000 Dementia
- $\downarrow$  2,500 Depression

### 10,000 Hip fractures

Using the Sport England MOVES tool. Based on ~ 8,5 million extra 20 minute trips per year



# Key Evidence for Healthy Places

# Neighbourhoods

- 66% of all carcinogenic chemicals are released in the 10% most **deprived areas** in the country.
- Children living on the 10% most deprived wards in the country are 4 times more likely to be hit by a car than children living in the 10% least deprived.



# Key Evidence for Healthy Places

### **Built Environment**

- Density and mix of land use
- Housing quality, supply and affordability
- Street layout and connectivity
- Active and public transport
- Open space, play space, green space and community space
- Access to public services, employment and other services
- Access to fresh food
- Access to alcohol
- Air quality and noise
- Mitigation of extreme weather events and changing climate

### Health

- Fitness, cardiovascular health and obesity
- Diabetes
- Cancer
- Safety
- Mental health
- Respiratory health
- · Accidents and falls
- Wellbeing and community participation
- Premature mortality



# Economic case for action

Public Health there is an Environmental component to each of these England

- Diet-related ill health cost the NHS £5.8 billion per year
- **Physical inactivity** contributes to one in six deaths in the UK and costs £7.4 billion a year to business and wider society
- Outdoor Exercise (Green Spaces) more than 8m adults engage in outdoor exercise per week: health benefits valued at up to £2.2bn
- **Poor housing** costs NHS is £1.4 2.0 billion per year for England. £18.6 bn wider societal costs.
- Better community cohesion could save £530M
  per annum
- Poor air quality alone imposes over £1bn in productivity losses each year.





# Walkable neighbourhoods and lower volumes of motorised transport increase levels of social interaction:



• Better community cohesion could save £530 million a year



### Planning and Public Health - a common agenda

#### National Planning Policy Framework

• Promoting Healthy Communities - The planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities. Source: DCLG (2012)

### National Planning Practice Guidance - Health

• Local planning authorities should ensure that health and wellbeing, and health infrastructure are considered in local and neighbourhood plans and in planning decision making. Source: DCLG (2014)

Public Health Outcomes Framework					
OUTCOMES					
Vision: To improve and protect the nation's health and wellbeing, and improve the health of the poorest fastest					
Outcome 1: Increased healthy life expectancy Taking account of the health quality as well as the length of life (Note: This measure uses a self-reported health assessment, applied to life expectancy.)					
Outcome 2: Reduced differences in life expectancy and healthy life expectancy between communities Through greater improvements in more disadvantaged communities					
(Note: These two measures would work as a package covering both morbidity and mortality, addressing within-area differences and between area differences)					
DOMAIN 1:	DOMAIN 2:	DOMAIN 3:	DOMAIN 4:		
Improving the wider determinants of health	Health improvement	Health protection	Healthcare public health and preventing premature mortality		
Objective: Improvements against wider factors that affect health and wellbeing, and health inequalities	Objective: People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities	Objective: The population's health is protected from major incidents and other threats, while reducing health inequalities	Objective: Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities		
Indicators Indicators Indicators	Indicators Indicators Indicators	Indicators Indicators Indicators Indicators	Indicators Indicators Indicators Course		

# Healthy places: A strategic approach



## Healthy People, Healthy Places Programme

**Overall Aim:** to reduce the overall burden of disease, mortality and health inequalities by addressing the wider determinants of health across the life course by improving the quality and access to the built and natural environment

Our **Vision** is to promote:

A future where everyone, wherever they live, is able to live, work and play in a place that promotes health and wellbeing, sustains the development of supportive and active communities and helps reduce health inequalities.

In short, "Healthy places to grow up and grow old in".

# PHE briefings and evidence reviews



### Public Health Healthy Places Evidence Briefs and Resources England




Unlocking funds for healthy planning by linking transport to multiple agendas

## Public Health Spatial Planning England for Health

### Genesis of the Evidence Resource

- evidence base still a matter of debate amongst the scientific community;
- A lot of the evidence around the impacts of the built environment on health comes from outside the UK or outside of Europe;
- What should public health specialist be asking for?
- What should planners be delivering?
- Does it work?
- Inform PHE's national advocacy work

Public Health England

Spatial Planning for Health An evidence resource for planning and designing healthier places



- Umbrella review of other systematic evidence reviews
- Complemented by selected empirical studies
- Concentrated on 5 key themes:
  - Neighbourhood Design
  - Housing

202

- Healthy Food
- Natural and Sustainable Environment
- Transport





Neighbourhood Design

### Neighbourhood Design

Enhance connectivity with safe and efficient infrastructure

- Improved street connectivity
- Public realm improvements (e.g. provision of street lighting)

Build complete and compact neighbourhoods

- Compact neighbourhoods
- Increased access to facilities and amenities

Enhance neighbourhood walkability

- Increase walking
- Improve infrastructure to support walking and cycling













#### Housing Energy Efficiency/Fuel Poverty Removal of home hazard Improve quality of Retrofitting (housing refurbs) housing Daylight and ventilation Diverse housing types Provision of affordable housing Increase provision of for vulnerable groups affordable housing Homeless







#### Healthier Foods

### Healthy Food

Provision of healthy	
affordable food	

- Access to healthy food for the general population
- Decrease exposure to unhealthy food environments
- Retail outlets selling health food





Urban food growing

Enhance community food infrastructure

 Provision of and access to allotments and adequate garden space





#### **Healthier Foods**



- Improved
   Reduced
   High Quality
- Medium Quality
- Low Quality
- NR (Not reported):

Methodological quality of the original research is unclear and should be treated with caution.

Association between a health impact & health Out outcome not Text obtained as part of the umbrella

#### Best Available Evidence:

review.

In some instances, more than one piece of review-level evidence reporting on the same health impacts and/or outcomes was identified as part of this umbrella review. In such instances this table highlights findings of the review(s) which reported evidence of the best methodological quality.





#### Disclaimer:

This diagram has been produced as part of a wider evidence resource, commissioned by Publo Health England, and developed by the University of the West of England. Please see the document Signal planning for health: an evidence resource for planning and designing healthier places for further information.



Note: For further information on what constitutes a healthy balanced diet, please see the Eat Well Guide, available at: https://www.gov.uk/government/publications/the-eatwell-guide





Natural & Sustainable Environments

### Natural and Sust. Env.

Reduce exposure to environmental hazard

- Improved air quality
  Exposure to air pollution
  Excessive noise
- Impact of flooding

Increase access to and engagement with the natural environment

- Aesthetic park improvements
- Improve access and maximise opportunities for outdoor activities
- Tackle climate change
- Neighbourhood tree planting











#### Transport Infrastructure for walking and Promote sustainable cycling transport • Encourage use public transp. infrastructure Prioritise pedestrians and Prioritise active travel cyclists and road safety Traffic calming measures Active travel to work and Enable mobility for all school **次**前的 ages Access to recreational space



and activities

-----

\*

for further information.



Public Health England



Healthy High Streets Good place-making in an urban setting



- 1. Diversity in the retail offer
- 2. Green and blue infrastructure
- 3. Traffic calming
- 4. Street design and furniture
- 5. Crime prevention and safety

## Evidence: Healthy Highstreets

## For optimum health promotion and to be considered a significant community asset, high streets should:

- be accessible to all members of the community
- be easy to navigate and safe to cross
- provide shade and shelter and places to stop and rest
- be walkable and provide options for cycling
- have low levels of noise and air pollution
- provide things to see and do and have a health promoting retail offer
- ensure people feel relaxed and safe
- Has a retail offer that is supportive of health

'...traffic calming in towns can be a strong stimulus for economic growth and be beneficial for local trade. Traffic calmed areas make people feel more relaxed with an inclination to walk more and to visit more shops...'







# Public Health Diversity on the High Street

- Mixed use streets have been shown to encourage active travel and social interaction through ease of access to amenities that are diverse in their offer, and clustered in one area.
- Mixed use streets also have the potential to improve diet related health inequalities through providing access to a range of convenient healthy food outlets and grocery stores.
- Principles when implementing mixed use developments include: ensuring building height is on a human scale, adds to the street scape and creates a varied shop frontage to add to aesthetics. This provides visual stimulation and encourages foot fall.
- High streets can diversify to the existing mix of uses through temporary installations such as pop up cafes, art galleries or parks to add visual interest, improved ambience and soundscapes and a more varied range of uses to the high street.







## **Concluding Thoughts**



## Evidence into practice: Key opportunities

- Defra's 25 Year Environment Plan (25YEP) commitment to 'green our towns and cities by creating green infrastructure'
- National Planning Policy Framework currently being updated – opportunity to influence inclusion of health and natural environment (linked to 25YEP)
- NHS Healthy New Towns Opportunity to share learning about what works in creating a healthy, sustainable place

### Concluding thoughts: Shaping the built environment

- PHE recognises that considerate design of the wider environment is fundamental to keeping people healthy and promoting health.
- Use public concern about air pollution to start discussions on how the wider built and natural environment can protect, promote and improve health and wellbeing to prevent ill-health.
- With PH now embedded in LAs, there are real opportunities for local PH teams to be engaged in the planning system
- Planners, builders, architects and engineers working with public health colleagues have a key role in creating places that support healthy lifestyles
- Planners and policymakers have an opportunity to use changes in the built environment to make progress toward healthier and more sustainable communities. (Wins for health; the environment; and the economy)



Concluding Thoughts:

### HOWEVER to achieve this will require:

- Leadership across different agencies and tiers of government.
- Building partnerships between housing, public health and healthcare agencies
- Evidence-informed decision-making
- Engagement with the Community
- Commitment to Innovation

# Public Health What does good look like?

Healthy Planning	<ul> <li>"Healthy developments" or developments built with health in mind, are common place and industry standards;</li> <li>Planning Departments understand health issues and are confident in making decisions based on health impacts;</li> <li>Public Health Teams in local authorities act on "place" as a way to address the wider determinants of health;</li> <li>Most of the population have access to good quality parks and open space which promote physical activity and good mental health;</li> <li>Health service infrastructure planned and being delivered to meet needs of growing population.</li> </ul>
Healthy Housing	<ul> <li>Reduction on the amount of non-decent housing in the country;</li> <li>All new housing built with health criteria and considerations at the heart of the decision making process;</li> <li>No overcrowding.</li> </ul>
Healthy Transport	<ul> <li>Significant steady decrease in the levels of physical inactivity and increase in active transport</li> <li>Most people walk to local centres and for journeys shorter than 15 mins;</li> </ul>

ŻŻ



## News/ Views/ Evidence Updates

### Sign up to our Knowledge Hub – "healthy places" https://khub.net/group/healthypeoplehealthyplaces

#### Including month Current Awareness Evidence Updates



Planning for Health – East of England 9 May 2018











#### Planning for Health – East of England 9 May 2018