



Public Health  
England

Protecting and improving the nation's health

# Heatwave Plan for England

## Summer preparedness 2020

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# Heatwave Plan for England

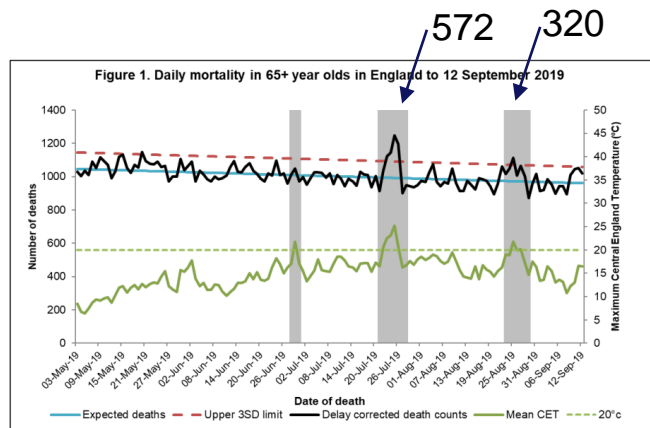
Prepare for, alert people to, and prevent, the major avoidable effects on health during periods of severe heat in England.

Sets out recommended actions for:

- National Health Service
- local government
- Social care
- professionals working with people at risk
- individuals, local communities and voluntary groups

# Heat-health risks

- Annual global temperature figures for 2019 confirm that the past decade was the warmest on record.
- High temperatures have **significant health consequences** and are associated with **increased mortality and increased morbidity**.



\*heatwave days are highlighted in grey

## Heat related illnesses

*Heat syncope*—dizziness and fainting, due to dehydration, vasodilation, cardiovascular disease and certain medications

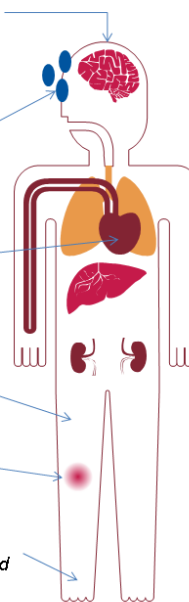
Excessive sweating can deplete fluid and salts

When blood temperature rises, the body stimulates sweat glands, dilates blood vessels and increases the heart rate

*Heat cramps* – caused by dehydration and loss of electrolytes, often following exercise

Increased blood flow to the skin cools the body by radiating heat, leading to heat rash (small, red itchy papules)

*Heat oedema* – mainly in the ankles, due to vasodilation and retention of fluid



### Health effects of heat

The main causes of illness and death during a heatwave are respiratory and cardiovascular diseases. Additionally, there are specific heat-related illnesses including:

#### Heat Exhaustion

- Nausea or irritability
- Dizziness
- Muscle Cramps or weakness
- Feeling faint
- Headache
- Fatigue
- Heavy sweating
- High body temperature

#### Heatstroke

- Hot, dry skin or profuse sweating
- Confusion
- Loss of consciousness
- Seizures
- Very high body temperature

# Heat & COVID-19: Potential risks

- **Potential increase in adverse outcomes amongst the same population groups affected by both high temperatures and COVID-19** For example, older people and those with comorbidities such as cardio-respiratory diseases
- **Increase in exposure to indoor overheating due to COVID-19 restrictions.** For example, people who have been advised to stay at home
- **Increased social isolation, especially for those who are vulnerable to COVID-19**
- **Reduced access to cool public spaces** for respite due to COVID-19 restrictions
- **System-level risks related to concurrency of impacts** For example, increased demand on social care services to prevent both heat and COVID-19 related harms

# Heat/COVID-19: Interacting individual risk

Both heat and COVID-19 infections put a strain on the heart and lungs, the kidneys and are linked with inflammation in the body

**Clinical vulnerabilities that have been linked with worse outcomes from COVID-19 that are also risks for heat related harms are:**

- high blood pressure
- chronic obstructive pulmonary disease
- heart and lung conditions (cardiovascular disease)
- conditions that affect the flow of blood in the brain (cerebrovascular disease)
- kidney disease

# Heat/COVID-19: Higher risk groups/settings

Specific populations are at increased risk of exposure to heat due to the context in which they live include:

- **Homeless people** whether sleeping rough or in shelters
- **People resident in specific institutional setting** e.g. care homes, prisons, inpatient psychiatric units
- **Some occupations, workplaces and schools** particularly those involving significant manual exertional and/or heat generation (e.g. cooking, some manufacturing roles)

**Many of these settings have restrictions in place to reduce COVID-19 transmission – additional considerations will be needed to ensure that plans are in place should a heatwave occur**

# Heat/COVID-19: Environmental risks

## Many more people will be at home this summer

- working from home, shielding to reduce their risk of infection, or self-isolating due to a COVID-19 infection in themselves or a contact

## 1 in 5 homes in England are prone to overheating

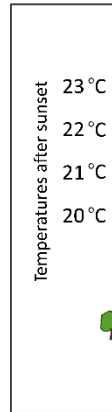
## Urban heat island

## Availability of cool green spaces

### One in eight British households has no garden

The percentage of homes without a garden is higher among ethnic minorities, with Black people in England nearly four times as likely as White people to have no outdoor space at home.

14 May 2020



One in eight households (12%) in Great Britain has no access to a private or shared garden during the coronavirus (COVID-19) lockdown, according to our analysis of Ordnance Survey (OS) map data.

#### Explore access to green space in your neighbourhood

- [Gardens](#)
- [Parks and playing fields](#)

This rises to more than one in five households in London (21%), easily the highest percentage of any region or country of Great Britain. The next highest is Scotland, at 13%.

In England, Black people are nearly four times as likely as White people to have no access to outdoor space at home, whether it be a private or shared garden, a patio or a balcony (37% compared with 10%). This is according to survey data from Natural England.






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# Summer preparedness 2020

## Slide deck: Heatwave plan actions

Published 13 May 2014  
Last updated 28 May 2020 — [see all updates](#)  
From: [Public Health England](#), [Department of Health and Social Care](#), and [NHS England](#)

### Documents

-  [Heatwave Plan for England](#)  
Ref: PHE publications gateway number: GW1289  
PDF, 1.67MB, 43 pages  
This file may not be suitable for users of assistive technology. [Request an accessible format.](#)
-  [Beat the Heat: coping with heat and COVID-19 \(poster\)](#)  
Ref: PHE publications gateway number: GW1289  
PDF, 205KB, 1 page  
This file may not be suitable for users of assistive technology. [Request an accessible format.](#)
-  [Beat the Heat: coping with heat and COVID-19 \(leaflet\)](#)  
Ref: PHE publications gateway number: GW1289  
PDF, 382KB, 15 pages  
This file may not be suitable for users of assistive technology. [Request an accessible format.](#)
-  [Beat the Heat: keep residents safe and well during COVID-19 \(poster and checklist\)](#)  
Ref: PHE publications gateway number: GW1289  
PDF, 250KB, 2 pages  
This file may not be suitable for users of assistive technology. [Request an accessible format.](#)
-  [Heat health risks and COVID-19: actions to prevent harm \(slide set\)](#)  
Ref: PHE publications gateway number: GW1289  
HTML



### COVID-19: Hot weather preparedness and response

- The guidance and good practice recommendations in the Heatwave Plan for [England](#) some additional actions for [Commissioners of health and social care \(all settings\) and local authority Directors of Public Health \(1\)](#) COVID-19
- The following actions are recommended:
  - Co
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  - Co
  - NH
- All actions are available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/424849/Heatwave\\_Plan\\_for\\_England\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/424849/Heatwave_Plan_for_England_2014.pdf)
- In addition to the actions set out in Page 20 of the Heatwave Plan for England:
  - work with partner agencies, providers and businesses to raise awareness about the concurrent risk of hot weather and COVID-19
  - encourage partners to sign up to the heat-health alert system
  - ensure care homes and hospitals are aware of the heatwave plan and are preparing for heatwave as a concurrent risk with COVID-19
  - engage the community and voluntary sector to support communities to help those most at risk, especially those who are socially isolated
  - ensure other institutional establishments (i.e. prisons, schools) are aware of heatwave guidance
  - work with local partners to facilitate equitable and flexible access to green public spaces during hot weather

17 Heatwave

18 Heatwave and summer preparedness 2020



# Beat the Heat

Coping with heat & COVID-19

## Keep cool at home



Many of us will need to stay safe at home this summer



Know how to keep your home cool



Look out for others safely, follow COVID-19 guidance

## Keep cool, keep well



Drink plenty of fluids and avoid excess alcohol



Slow down when it is hot



Stay connected, listen to the forecast

## Find cooler, safer places



Go indoors or outdoors, whichever feels cooler



Self-isolate at home if advised to do so



Use cool spaces considerably, keep your distance

## Watch out



Be on the lookout for signs of heat related illness



Cool your skin with water, slow down and drink water



Stay safe when swimming



Get help. Call NHS 111 or in an emergency 999

For more information go to [www.nhs.uk/heatwave](http://www.nhs.uk/heatwave)

PHE publications gateway number: GW-1289

## Beat the Heat: Coping with heat and COVID-19



## Stay cool at home



Many of us will need to stay home this summer

### Why is this important?

- to reduce the transmission of coronavirus (COVID-19) many people will be working from home
- anyone with symptoms of COVID-19 will need to stay at home for at least 7 days, others may be advised to stay at home if they have been in close contact with someone who has COVID-19 or they are living in the same household as someone with COVID-19
- people who are extremely clinically vulnerable have been advised to limit their contact with others and to stay at home to limit their risk
- even during a relatively cool summer, 1 in 5 homes in England are likely to overheat

### What can I do?

- Make sure you are aware of steps you can take to cool your home (see below)

# Indoor overheating – care settings

## Healthcare estates

- nearly 50% of NHS hospital trusts reported at least one incident of overheating that required a risk assessment<sup>1</sup>
- Limited capital investment in cooling measures eg insulation, external shading
- Ad hoc procurement of air conditioning during hot spells, use of fans, ice lollies



## Care homes

- culture of ‘warmth’, lack of effective heat management<sup>2</sup>

1. Estates Return Information Collection (ERIC) database, 2018; 2. <https://www.climacare.org>

# Indoor Overheating – healthcare estate

## **Cooling interventions**

- Rapid (pragmatic!) evidence review to support decisions in different settings

## **Heat and PPE**

- Briefing for Health and Safety Executive, targeted communications

# Indoor overheating – care homes

**Public Health England**

## Beat the Heat

Keep residents safe and well during COVID-19

During previous heatwaves, people in residential and care settings have been at particularly high risk of illness and death. During the COVID-19 pandemic, it is especially important that you know what actions to take to keep residents safe from high temperatures.

**Residents at highest risk**

Many people at high risk from heat are also at risk of severe illness if infected with COVID-19.

Some medications can also place people more at risk from heat.

- Identify those at highest risk
- Know your care home response plan
- Monitor temperatures in all rooms

**Keep residents cool**

Keeping cool is vital in hot weather. There are actions you can take to help residents remain well. Signs of heat related illness include nausea, drowsiness and headache.

- Recognise heat related illness
- Monitor hydration and fluid intake
- Fans only for use in single rooms with COVID-19 free residents

**Keep the building cool**

There are simple actions to take to reduce overheating in care homes.

- Open windows at night to allow for cooling
- Use blinds to reduce heat gain and create cross ventilation if possible
- Turn heating systems off

**Take action**

Treatments for heat-related illness are always the same. Cool the person down and get help if they are unresponsive.

- <26°C: Move to somewhere cooler if safe to do so
- Cool showers, wet skin, fluids
- Get help or Call 999 in an emergency

For more information go to [www.nhs.uk/heatwave](http://www.nhs.uk/heatwave)

### Are you and your care home prepared for hot weather?

**Before hot weather conditions**

Y/N Notes/ responsible person

- Does your care home have a plan in place should hot weather be forecast and/or occur?
- Do you know the content of the plan and where to find it?
- Do you know what to do if it becomes hot inside the care facility?
- Can you store all medicines, according to the instructions on the packaging, even if indoor temperatures rise above that stated on the packaging? If not, what is your organisation's plan for managing this?
- Do you know how to keep rooms cool during hot weather?
- Do you know how to keep residents cool in hot weather?

**Residents at risk**

Y/N Notes/ responsible person

- More residents than usual may be at risk from heat due to COVID ill-health and COVID restrictions. Review who is at high risk
- Are any of your residents unable to adapt their own behaviour and/or environment to stay cool?
- Do you know that you are also responsible for identifying if a room is overheating?
- Do you know who to report an overheating issue to?

**Keep your residents cool**

Y/N Notes/ responsible person

- Are you able to ventilate the rooms eg, can windows or vents be opened to create a through-flow of air whilst ensuring the safety of residents?
- Does your facility have external awnings to provide external shade? Do you know how to operate them?
- Are fridges and freezers working properly? If not, do you know who is responsible for taking action?
- Do you know if indoor temperatures in bedrooms and common areas in your facility are monitored (ie are there indoor thermometers)? Who is responsible for this?
- Do you know who is responsible for managing the heating system in your care home?
- Do you know how to turn off the heating in individual bedrooms and common areas? Who is responsible for taking this action?

If the answer to any of the questions is 'no', see the Heatwave Plan for England and associated documents for further information, and ask your line manager for advice.  
[www.gov.uk/government/publications/heatwave-plan-for-england](http://www.gov.uk/government/publications/heatwave-plan-for-england)

PHE publications gateway number: GW11399

**Department of Health & Social Care**

**CARE**

### COVID-19: Our Action Plan for Adult Social Care

Home > Coronavirus (COVID-19): support for care homes

**Department of Health & Social Care**

## Guidance

# Coronavirus (COVID-19): care home support package

Updated 22 May 2020

**Contents**

- Introduction
- Infection prevention and control
- Stepping up NHS Clinical Support

## Introduction

COVID-19 continues to present an unprecedented challenge for social care. Since this pandemic began, we have been working flat out to support the social care sector – drawing on all the levers that government has to help social care providers look after

# Additional actions

## Cooler Safer public spaces

- Briefing for local Directors of Public Health, 'Making the case' for equitable use of urban green space

## Advice for people who need to stay at home (incl. shield group)

- Focus on pre-heatwave planning and L2/L3 actions

## Hypervigilance of the Heat-Health alert system

The screenshot displays the 'Heat-health watch' interface. At the top, it states 'Current watch level: Level 1 - Summer Preparedness' and 'Issued at: 08:19 on Wed 23 Aug 2018'. A progress bar shows five levels: Level 1 (Green), Level 2 (Yellow), Level 3 (Orange), Level 4 (Red), and Heat-Health threshold values (Dark Red). The current level is Level 1. A map of England shows the current status by region, with a key indicating: Grey for 'Region not included', Yellow for 'Summer preparedness and long-term planning', Orange for 'Alert and readiness', Red for 'Heatwave action', and Dark Red for 'National Emergency'. Text on the page includes: 'Green — Summer preparedness and long-term planning. This is the minimum state of vigilance during the summer. During this time social and healthcare services will ensure that all awareness and background preparedness work is ongoing.' and 'Advice: There are actions you can take now to reduce the harm to health of hot weather. External shades or blinds are very effective at reducing indoor temperatures. Internal blinds or curtains are less effective but cheaper and easier to install. More information can be found at the Heatwave Plan for England page.' Below the map, there is a 'Heat-Health Watch' section with a description: 'The Heat-Health Watch Service is designed to help healthcare professionals manage through periods of extreme temperature. The service acts as an early warning system forewarning of periods of high temperatures, which may affect the health of the UK public.' and 'The Heat-Health Watch Service operates in England from 1 June to 15 September each year. In association with Public Health England. This is the period when temperature thresholds are most likely to be reached. However, should thresholds for an alert be reached outside of this period, an extraordinary heat-health alert will be issued and stakeholders are advised to take the usual public health actions.' It also mentions 'The Met Office forecasts day-time and night-time maximum temperatures, which are monitored regionally. When certain heat thresholds are passed, a warning is issued and sent to relevant health professionals and people working in social care as well as displayed on our website. This enables health professionals to take action to minimise the harm of the heat on people's health.' A link 'contact our Health Team' is circled in red. A 'Related links' section includes: 'Public Health England', 'Heatwave Plan for England - GOV.UK', 'Staying cool - Age UK', 'Heatwave: be prepared - Live Well - NHS Choices', 'NHS Health Scotland', and 'Health in Wales'. At the bottom, it states: 'A UK heatwave threshold is met when a location records a period of at least three consecutive days with a daily maximum temperature of at least 25°C for three consecutive days.' and '© 2018 NHS. All rights reserved. For more information on our services visit: [www.nhs.uk](#)'.

# Heat & COVID-19: Key messages

COVID-19 **amplifies** the risks of hot weather

**Fear** of COVID-19 should not prevent action to tackle the risks from hot weather and heatwaves

It is **critical** that actions to prevent health harms from high temperatures **continue**, with necessary adaptations in line with coronavirus guidance to keep everyone **safe**

## Acknowledgements – Extreme events team!

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