



Public Health
England

Protecting and improving the nation's health

Beat the Heat:

Coping with heat and COVID-19

Although most of us welcome the summer sun, high temperatures can be harmful to your health. The heat can affect anyone, but some people run a greater risk of serious harm. Many of those who are at risk of harm from heat are also at greater risk of severe illness due to coronavirus (COVID-19) and may need to spend more time at home than they would usually. Others may need to stay at home because they are self-isolating or recovering from the infection.

It is therefore important that you know what actions to take to keep yourself and others safe from high temperatures.

This document will tell you how to stay safe in hot weather, including how to keep your home cool. It tells you who is at greatest risk of ill health from the heat, how to recognise when you or someone's health may be affected, and what to do if you or someone else becomes unwell as a result of the heat.

Stay cool at home



Some of us may spend more time at home this summer

Why is this important?

Even during a relatively cool summer, 1 in 5 homes in England are likely to overheat.

People who have had a positive coronavirus (COVID-19) test or have been in contact with someone who has tested positive for COVID-19 will need to self-isolate, usually at home.

Everyone who has been identified as clinically extremely vulnerable to COVID-19 should have been offered a COVID-19 vaccine. However, as no vaccine is 100% effective people in this group have been advised to continue to minimise the number of social contacts that they have.

Many more people are working from home, when they can.

What can I do?

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



Know how to keep your home cool

Why is this important?

Some people are particularly at risk from heat and for them a hot home can worsen existing health conditions. Many of the deaths during heatwaves occur at home.

What can I do?

In preparation for warmer weather, use our simple checklist to find out if your home is at risk of overheating and find out what you can do if there is a problem. You can download the checklist from the [PHE heatwave webpage](#).

Shade or cover windows exposed to direct sunlight, external shutters or shades are very effective, while internal blinds or curtains are less effective but cheaper.

Metallic blinds and dark curtains can make a room hotter.

Open windows when the air feels cooler outside than inside, for example, at night. Try to get air flowing through your home, if possible. Letting the fresh air in can also help remove air that contains virus particles and prevent the spread of COVID-19. There is [guidance on the ventilation of indoor spaces to stop the spread of COVID-19](#)

Turn off the central heating, and lights and electrical equipment that aren't in use.

Use electric fans if the temperature is below 35°C, but do not aim the fan directly at the body and ensure you stay hydrated with regular drinks. Do not use a fan if anyone in the home has symptoms of COVID-19.

Check that fridges and freezers are working properly to minimise internal heat gains.

If you have concerns about an uncomfortably hot home that is affecting your health or someone else's health, seek medical advice.

You may be able to get help from the environmental health department within your local authority; they can do a home hazard assessment.



Look out for others safely, follow COVID-19 guidance

Why is this important?

The heat can affect anyone, but some people run a greater risk of serious harm. Many people who are at higher risk of ill health due to heat are also at higher risk of severe illness from COVID-19.

We still have much to learn about how COVID-19 affects the body but both heat and COVID-19 put a strain on the heart and lungs, the kidneys and are linked with inflammation in the body.

Those who may be more at risk from the effects of heat include the following:

- older people, especially those over 75
- babies and young children
- people with a serious chronic condition, particularly dementia, heart, breathing or mobility problems
- people with serious mental health problems
- people on certain medications, including those that affect sweating and temperature control (for example, diuretics, antihistamines, beta-blockers and antipsychotics)
- people who are already ill and dehydrated (for example, from gastroenteritis)
- people who misuse alcohol or drugs
- people who are physically active (for example, soldiers, athletes, hikers and manual workers)
- homeless people

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

There are also some other important risks to consider with heat and COVID-19:

- the COVID-19 pandemic has increased social isolation as people who are vulnerable or anxious stay at home; people who are socially isolated are at higher risk during hot weather especially those living alone
- those who are less able to adapt to hot weather rely on others to help them to stay cool and well during hot weather; it is important that care continues even if it has to be done in a different way

What can I do?

Look out for neighbours, family or friends who may be isolated and unable to care for themselves; make sure they are able to keep cool during a heatwave.

If you need to provide direct care to someone at risk from the hot weather, [follow the guidance on providing care for others](#).

Stay out of the heat, cool yourself down, keep your environment cool or find somewhere else that is cool if possible.

Get medical advice if you are suffering from a chronic medical condition or taking multiple medications.

Make sure medicines are stored below 25°C or in the fridge (read the storage instructions on the packaging).

Carry on taking all prescribed medicines unless advised not to by a medical professional. But be aware that some prescription medicines can reduce your tolerance of heat.

Paracetamol (and aspirin) may be used to manage COVID-related symptoms but it is recommended that they are not used solely to reduce body temperature. However, they should not be used to treat heatstroke due to increased risks of blood clotting and effects on the liver.

Be alert and if someone is unwell or needs further help, see the resources section at the end of this leaflet.

Stay cool, Keep well



Drink plenty of fluids and avoid excess alcohol

Why is this important?

Fluid requirements are higher than normal in hot weather and after strenuous activity, to replace fluids lost through sweating.

Everyone is at risk of dehydration in hot temperatures, but babies, children and the elderly are particularly vulnerable.

Keeping hydrated will be especially important for people who are unwell with a COVID-19 infection and managing their symptoms at home.

Those who have been unwell with COVID-19 and are recovering, particularly those who have been discharged from hospital, are likely to be more vulnerable to risks from heat stress and dehydration due to complications, for example, damage to their kidneys.

What can I do?

Look out for signs of dehydration such as increased thirst, a dry mouth, dark urine, and urinating infrequently or small amounts. Serious dehydration needs urgent medical attention, more information is available at the [NHS Dehydration webpage](#).

Drink plenty of fluids: water, lower fat milks and tea and coffee are good options.

Fruit juice, smoothies and soft drinks do count towards your fluid intake, but can be high in sugar. Limit fruit juice or smoothies to a combined total of 150ml a day and swap sugary soft drinks for diet, sugar-free or no added sugar varieties.

Detailed advice on hydration for different groups of people, including older people is available the [British Nutrition Foundation Healty hydration webpage](#).



Slow down when it is hot

Why is this important?

Heavy activity can make you prone to heat related illnesses, even if you are fit and healthy.

What can I do?

Avoid extreme physical exertion. If you can't avoid strenuous outdoor activity, such as sport, DIY or gardening, keep it for cooler parts of the day – for example, in the early morning or evening.

Children should not take part in vigorous physical activity on very hot days, such as when temperatures are above 30°C.

More of us are walking and cycling to support social distancing measures on the transport system; listen to the forecast and take it easy if the weather is hot, especially if you are travelling in the hottest part of the day.



Stay connected, listen to the forecast

Why is this important?

Knowing the forecast can help you plan ahead and adapt as necessary.

Heatwaves may affect other services, such as power and water supplies, and transport.

Air pollution can become worse during periods of hot weather.

What can I do?

Listen to the news to be aware of when a heatwave has been forecast and how long it is likely to last.

Connect with vulnerable neighbours and family members to check if they are coping with the heat, know how to adapt their home and have everything they need.

Check the weather forecast and any high temperature health warnings at the [Met Office website](#).

Health advice for the general population and those who may be particularly sensitive to air pollution is available from UK AIR by calling 0800 55 66 77 (recorded information) or visiting the [UK Air information resource webpage](#).

Cooler safer places



Find somewhere cool to rest, indoors or outdoors

Why is this important?

It is important for your health to avoid getting hot in the first place.

If you do get hot, it is important to give your body a break from the heat.

It may be cooler outside in the shade than inside an overheated building.

What can I do?

Take a break from the heat by moving to a cooler part of the house, especially for sleeping.

Find some shaded green space or have a cool bath or shower.



Self-isolate if you have symptoms or a positive test

Why is this important?

Anyone with COVID-19 symptoms or a positive test result should stay at home and self-isolate immediately. This is because you could pass the infection on to others, even if you don't have symptoms.

What can I do?

Follow the [advice on how to protect yourself and others from coronavirus \(COVID-19\)](#).



Use cool space considerately, keep your distance

Why is this important?

Many homes can be prone to overheating so it may be cooler outside.

During sunny periods parks and public spaces may become busy but it is important that everyone continues to follow COVID-19 guidance.

It may not be possible for you to easily identify if someone is clinically vulnerable to COVID-19 or is trying to minimise their contact with others.

What can I do?

Follow COVID-19 guidance when using shared outdoor spaces. Be respectful of others who may be at higher risk from COVID-19 and keep your distance.

If you have children ensure that they also follow the advice on social distancing.

Watch out



Be aware of signs of heat-related illness

Why is this important?

Chronic illnesses can get worse in hot weather.

Heat exhaustion and heatstroke are 2 potentially serious conditions that can occur if you get too hot:

- heat exhaustion is where you become very hot and start to lose water or salt from your body – common symptoms include weakness, feeling faint, headache, muscle cramps, feeling sick, heavy sweating and intense thirst
- heatstroke is where the body is no longer able to cool itself and the body's temperature becomes dangerously high – it is less common, but more serious and untreated symptoms include confusion, seizures and loss of consciousness

What can I do?

You can find out more, such as common signs and symptoms to look out for, on the [NHS Heat exhaustion and heatstroke website](#).



Cool your skin with water, slow down and drink water

Why is this important?

If heat exhaustion isn't spotted and treated early on, there's a risk it could lead to heatstroke. Untreated heatstroke can be fatal.

What can I do?

If you notice that someone has signs of heat related illness, you should:

- get them to lie down in a cool place – such as a room with air conditioning or somewhere in the shade
- remove any unnecessary clothing to expose as much of their skin as possible
- cool their skin with cool water, you could use a cool wet sponge or flannel, cool water spray, cold packs around the neck and armpits, or wrap them in a cool, wet sheet
- fan their skin while it's moist – this will help the water to evaporate, which will help their skin cool down.
- get them to drink fluids – these should ideally be water or a rehydration treatment
- do not give them aspirin or paracetamol – this can put the body under more strain; they should carry on taking all other prescribed medicines unless advised not to by a medical professional

Stay with the person until they're feeling better. Most people should start to recover within 30 minutes.



Stay safe when swimming

Why is this important?

During warm weather going for a swim can provide much welcomed relief.

What can I do?

Whether you are an experienced swimmer or not, there are simple principles you should follow when swimming:

- always look for warning and guidance signs
- only enter the water in areas with adequate supervision and rescue cover
- always wear a buoyancy aid or lifejacket for activities on the water or at the water's edge (such as when boating or fishing)
- never enter the water after consuming alcohol
- be aware of underwater hazards
- get out of the water as soon as you start to feel cold
- swim parallel with the shore, not away from it
- avoid drifting in the currents
- do not enter fast flowing water
- always take someone with you when you go into or near water. If something goes wrong they will be able to get help
- if someone is in difficulty in the water shout reassurance to them, help and call the emergency services (call 999 or 112)



Get help. Call NHS 111 or in an emergency 999

Why is this important?

Severe heat exhaustion or heatstroke requires hospital treatment

What can I do?

If a person has improved with the cooling advice above but you still have concerns about them, contact your GP or NHS 111 for advice.

You should call 999 for an ambulance if:

- the person doesn't respond to the above cooling treatments within 30 minutes
- the person has severe symptoms, such as a loss of consciousness, confusion or seizures

If the person is unconscious move any potential hazards, then follow the steps above and place them in the recovery position (on their side with a clear airway) until help arrives.

For more information

Specific resources for heat risk and COVID-19 have been developed and are available at the [Heatwave plan for England](#) webpage

NHS website [Heatwave: how to cope in hot weather](#)

NHS website [Heat exhaustion and heat stroke](#)

For free medical advice for any non-emergency 24 hours a day use [NHS111 online](#) webpage, or call the NHS on 111

Government [advice and guidance on coronavirus \(COVID-19\)](#)

Public Health England's advice on [Ventilation of indoor spaces to stop the spread of coronavirus \(COVID-19\)](#)

[PHE heatwave plan for England](#) includes a checklist for identifying and managing indoor overheating.

[Met Office](#) weather forecast and high temperature health warnings.

[Red Cross emergency app](#) for information and alerts

[Local authority contact details](#).

Local accredited home improvement agency or handyperson services:

[Home Improvement Agencies: making homes warm, safe and secure](#) (or call 0300 124 0315).

Or for elderly people, [FirstStop](#) (or call 0800 377 7070)

[Sunsmart](#) website for information about staying safe in the sun

[UK-AIR](#) – health advice about those who may be particularly sensitive to air pollution. or call 0800 55 66 77

[Free air quality text alerts](#), or text 78070

[Royal Life Saving Society UK](#) advice on water safety