

# Heatwaves

## Teacher Notes

This teaching resource has been created for use with learners aged between 10 and 19. Use the PowerPoint and teacher notes to help learners understand what heatwaves are and how they impact on our lives.

The resource can be used in form time, assembly time, or in a PSHE, Citizenship or Enrichment lesson. Discussion time can be limited or extended, depending on the learners you are using the resource with and the time available.

## Background information on heatwaves

A heatwave is defined as a period of unusually hot weather that persists for at least three consecutive days. In the UK, heatwaves are becoming hotter, longer, more frequent and more dangerous. All of the top 10 warmest years on record have occurred since 2002. The hottest day on record in the UK was 19th July 2022, when temperatures reached 40.3°C.

Extreme heat is deadly and kills more people than any other weather event. Climate change is making extreme heat events more frequent, more severe, and last longer. There is an increase in the number of people who need medical attention in the UK after just two days of temperatures of 24°C or above.

Medical conditions caused by heatwaves include heatstroke, heat exhaustion, sunburn and dehydration. Children, elderly people and pregnant women are particularly vulnerable. It can also cause emotional stress and psychological trauma.

Cities can get up to 10°C hotter than the countryside, causing roads to melt, rail tracks to buckle and disruption to phone and energy networks. In rural areas, crops can fail, animals can suffer and die, and wildfires can break out.

In both rural and urban areas, there can be water shortages. Research, including the latest Intergovernmental Panel on Climate Change (IPCC) report, shows that climate change already contributes to humanitarian crises in vulnerable contexts, with the world's poorest communities being impacted the most severely. The report underscores that working with communities to adapt and prepare for climate change impacts does work; responding to disasters as they happen is no longer enough.

The Red Cross respond to emergencies but also empower communities to combat the effects of climate change. For example, teaching agricultural techniques to mothers in Zimbabwe and farming techniques to those in drought-hit areas.

## Learning objectives

- Learn about the definitions and dangers of heatwaves.
- Apply understanding of how extreme heat events can impact people's lives, particularly vulnerable communities.
- Share thoughts and ideas on which aspects of a heatwave's effects are most significant.

## How do I use this resource?

Explore the growing impact of extreme heat events. Use photos to explore the impact that heatwaves have on people both in the UK and in other parts of the world.

Download the PowerPoint to deliver the activities. Use one, some or all of the activities, as suits you. Each one can be done in ten to fifteen minutes. Embed this activity into your lessons or use it in assembly or tutor time to engage learners with current events and humanitarian news.

The level of explanation and the length of the session can be adapted to suit the age of your learners.

**Throughout the PowerPoint presentation, you'll find useful information in the notes under each slide. Use these to support your explanations to learners and develop discussions.**

Supplement and extend learning on heatwaves by downloading the free British Red Cross [Weather Together](#) teaching resources. Weather Together is a toolkit for 10-16-year-old students to teach them all about how to prepare for and cope with extreme weather, including heatwaves.

# Session overview

## Respond and discuss

Using the PowerPoint, explore the photos of London during a heatwave and International Federation of Red Cross (IFRC) volunteers establishing an emergency water supply in Peru.

- Support learners with their analysis of the photos and associated topics, through the “see, think, feel” framework.
- Discuss the questions linked to the photos on slides 3, 4 and 5, ensuring all learners are able to share their responses.
- Help learners consider how concerned they personally would be by a heatwave and its impact, then support them to make a five-point plan to prepare for an upcoming heatwave. You may wish to refer to the [advice](#) on the British Red Cross website.
- Facilitate discussions about why people’s plans might differ and whether the affects of heatwaves will impact people around the world equally.
- Use the notes on each PowerPoint slide to guide you and address misconceptions learners may have about the topic.

Discuss and debate the statements:

- The impact on people’s physical health is the most significant and troubling aspect of heat waves.
- The impact of heat waves will be felt equally in all parts of the world.

Do learners agree or disagree? Why?

Support learners to listen to and respect others’ viewpoints, and to explain the reasons behind their opinions.

## The wider context

Ask learners to consider any other examples they are aware of where extreme weather events and the effects of climate change have impacted on people’s lives. Explore what these impacts are and where in the world they occur.

Look at Newsthink resources on [Amazon wildfires](#) and [Hurricane Dorian](#) for more context around extreme weather events and the effects of climate change.

Discuss the associated anxiety some people may experience around extreme weather. Explore this further with the [Weather Together](#) teaching resources: a toolkit to teach 10-16-year-olds how to prepare for and cope with extreme weather events, including resources on flood risk, how to prepare for the next heatwave, and eco-anxiety.

## Time to reflect

Encourage learners to reflect on their personal opinions, feelings and values in their own time. They could be encouraged to record their thoughts in a PSHE topic book. Or you could create a 'Discussion Display' on a classroom wall, where learners can contribute thoughts or questions.

## Next steps

Further discussion and reflection activities could take place in subsequent lessons. You could focus on the following questions:

- What emotions does this topic evoke in you, and why do you think you feel this way?
- What are the international responses to increasing temperatures and heatwaves?
- What steps could they take as individuals to respond to heatwaves?

Explore further actions people can take to combat climate change and how to support those who are most affected by it. This could include raising awareness by sharing information with others through an event at school.

You can also support learners to discover how the Red Cross helps people in the UK and around the world prepare for, deal with and recover from the [impact of climate change](#).

Make learners aware of the wealth of information available on the British Red Cross website about [first aid](#) and the [free first aid app](#) that is available to download. Older learners may find the information about [preparing for emergencies](#) on the website interesting and useful.