

Heatwave emergencies: learn

These activities introduce heatwave emergencies: they explain some of the key characteristics of heatwaves and the effects they can have. This section also outlines some of the actions children and their families can take when responding to a heatwave emergency.

Activities can be worked through in order. You can do all of the activities, or you can pick and choose. If you are short on time, you could pick the following activities:

1. What is a heatwave?
and
2. What do heatwaves look and feel like?
and
3. Heatwave health risks **or** Experiencing a heatwave.

The 'Heatwave worksheets' are optional. These worksheets can also be used as homework tasks.

Learning objectives

By the end of the 'Heatwave emergencies: learn' activities children will be able to:

- > Identify and explain what heatwaves are and understand the impacts they can have on people and the environment.

Learn activity summary		
Time	Activity name	Supporting resources
10 minutes	What is a heatwave?	Heatwave factsheet for teachers Sticky notes and pens Sticky tack
10 minutes	What do heatwaves look and feel like?	Heatwave short film Heatwave short film transcript Heatwave factsheet for teachers
10 minutes	Heatwave health risks	Heatwave health risks: table Heatwave health risks: cards Heatwave health risks: answers Heatwave factsheet for teachers
20 minutes	Experiencing a heatwave	Experiencing a heatwave character cards
10-20 minutes	Heatwave worksheets	'Staying cool in a heatwave' worksheet 'Staying cool in a heatwave' answers 'Heatwave word search' worksheet 'Heatwave word search' answers

1. What is a heatwave?

Activity type



Learn

Suggested time



10 minutes

Suggested group size



Small groups

What you need

1. [Heatwave factsheet for teachers](#)
2. Sticky notes and pens
3. Sticky tack

Introduction

This activity introduces what a heatwave is and how they happen. Explore what children already know about heatwaves and develop their understanding through drawing on information in the 'Heatwave factsheet for teachers'.

Activity description

Before the activity:

1. Hand out sticky notes and pens to each group of children, and have some sticky tack available.
2. Print out a copy of the 'Heatwaves factsheet for teachers' for your reference.

Divide the class into small groups. Write 'heatwaves' in the centre of the board. Explain that:

- > In this session we are going to start thinking about heatwave emergencies and how to stay safe if one were to happen.
- > In your groups discuss and then write down words or phrases that make you think of heatwaves. Use a different piece sticky note for each word or phrase. These words or phrases could be about what heatwaves are, when and where they can happen, or how they can affect people or the environment.

Give the children a few minutes to write down their ideas and then continue the activity:

- > One member of each group at a time brings one of your group's sticky notes up to the board.
- > Read the word or phrase out and then stick it onto the board around the word 'heatwaves'. If you have the same word as other groups, stick them next to each other.

Continue this process until all the words/phrases children have written have been read and put up on the board. Once there are plenty of words of the board, you could ask the class how they think heatwaves happen, referring to the 'Heatwaves factsheet for teachers.'

2. What do heatwaves look and feel like?

Activity type



Learn

Suggested time



10 minutes

Suggested group size



Whole group

What you need

1. [What are heatwaves?](#)
2. [Heatwaves factsheet for teachers](#)

Introduction

This activity helps children become familiar with what heatwaves look and feel like by explaining what heatwaves are and developing their knowledge through questions.

Activity description

Before the activity:

1. Have the 'What are heatwaves' script ready to read out
2. Print out a copy of the 'Heatwave short film transcript' for your reference.

Introduce 'Heatwaves'

- > Explain that you are going to read out some information about heatwaves. It will show you what heatwaves are like and what their effects can be. It will also give you a few tips on how to stay safe.

After reading the information, ask a few questions:

- > What is a heatwave?
- > When might a heatwave occur?
- > What are the health risks related to heatwaves?
- > What do we need to be careful of during a heatwave?
- > How might heatwaves affect people's lives?
- > Are some people more at risk than others? Think of examples if you can.

You can refer to the 'Heatwaves factsheet for teachers' if needed, to answer these questions and to develop any other questions you might like to explore with the class.

3. Heatwave health risks

Activity type



Learn

Suggested time



10 minutes

Suggested group size



Small groups

What you need

1. [Heatwave health risks: table](#)
2. [Heatwave health risks: cards](#)
3. [Heatwave health risks: answers](#)
4. [Heatwave factsheet for teachers](#)

Introduction

This activity helps children identify the characteristics and impacts heatwaves can have on people and the environment.

Activity description

Before the activity:

1. Print out copies of the 'Heatwave health risks: table' on A3 paper. You will need one copy for each group.
2. Print out copies of the 'Heatwave health risks: cards' on single-sided A4 paper and cut out the cards. You will need one set of ten cards for each group.
3. Print out a copy of the 'Heatwave health risks: answers' for your reference.

Divide the class into small groups and hand each one a set of cards and the A3 'Heatwave health risks: table'. Explain that:

- > Each group has been given a set of ten cards and a table with the names of different health risks that heatwaves can cause in the left column. Some of the cards have definitions of the health risks on them and some have descriptions of what to do if someone is affected by the health risk.
- > As a group, look through your cards and decide which 'definition' and 'what to do' cards match the health risk in the left column. Then position the cards in the correct place in the table.

Once groups have arranged the cards in the table, work through each health risk asking the class which 'definition' and 'what to do' card matches it. You may wish to have your own set of cards to stick onto the board with sticky tack under the two category headings. The answers are on the 'Heatwave health risks: answers' sheet.

At the end of the activity ask the children what they have learnt about heatwaves. You can use some or all of the following suggested prompt questions to generate group discussion:

- > What impact can heatwaves have on people?
- > How might people feel if they knew a heatwave was going to happen in their area?

> What could people do to stay safe during a heatwave?

If you would like to explore how they can stay safe further with your group, you can watch the 'Heatwave short film' or print out a copy of the 'Heatwave short film transcript' or work through the 'What is a heatwave like?' activity.

4. Experiencing a heatwave

Activity type



Learn

Suggested time



20 minutes

Suggested group size



Small groups

What you need

1. [Experiencing a heatwave character cards](#)

Introduction

This activity aims to get children to think about what experiencing a heatwave is like through an activity called 'hot seating'.

Activity description

Before the activity:

1. Print out copies of the 'Experiencing a heatwave character cards' and cut out the five cards. You will need one set of cards for each group.

Divide the class into small groups and explain that:

- > To help us understand what it might be like to be affected by a heatwave, we are going to do an activity called 'hot seating'.
- > 'Hot seating' means one person takes on a character and the rest of the group ask questions to find out more about the character and their experiences.

Give one child in each group a character card. Give them time to read their card and familiarise themselves with the character.

Arrange each small group so that there is an 'audience' in front of a chair that is the 'hot seat'. If you prefer, you could have one hot seat and the whole class as the audience, with different children taking on different characters and taking the hot seat one at a time.

The children in each group ask the child in the hot seat questions about themselves and about their experience of a heatwave - described on the character card. For example, they might ask:

- > How old are you?
- > Where were you during the heatwave?
- > Who were you with?
- > How long did the heatwave last?
- > What was the heatwave like?
- > How did you feel during the heatwave?

After a few minutes, another child in each group will get a new character card, and will be in the hot seat to answer questions. If you have time, continue in this way, letting five children in each group have a turn in the hot seat with a new character card.

At the end of the activity ask the children how they might feel during a heatwave emergency and what they might do to feel prepared. If you have time, you could work through some of the coping skills activities, to support children in learning techniques to feel calmer in an emergency.

5. Heatwave worksheets

Activity type



Learn

Suggested time



5–10 minutes per worksheet

Suggested group size



Individual

What you need

1. [‘Staying cool in a heatwave’ worksheet](#)
2. [‘Staying cool in a heatwave answers’](#)
3. [‘Heatwave word search’ worksheet](#)
4. [‘Heatwave word search answers’](#)

Introduction

This activity helps children consolidate their learning about the impact of heatwaves and reinforces their language around this topic.

Activity description

Before the activity:

1. Print out one or both of the worksheets. You will need one copy for each pupil.
2. Print out a copy of the answers sheet for each worksheet for your reference.

The following worksheets can be used in class or as follow-up homework activities:

- > Staying cool in a heatwave
- > Heatwave word search.

Heatwave factsheet for teachers

What are heatwaves?

- > A heatwave is a period of unusually hot weather that is most common in summer. In the UK, a heatwave generally occurs when the temperature exceeds 30°C during the day and 15°C at night on at least two successive days. These high temperatures could have a significant effect on people's health, so it is important to listen out for weather updates in case a heatwave alert is issued.
- > Heat can affect anyone, but some people are at greater risk of serious harm than others. These include: babies and young children, older people and people with long-term health conditions, particularly breathing or heart-related problems.

What are the health risks during a heatwave?

Health risk	Symptoms	Treatment
Dehydration: when your body loses more water than it takes in, often as a result of sweating in hot weather.	> dry mouth > dizziness > headache > dark urine	Drink plenty of water.
Heat exhaustion: caused by excessive sweating resulting in a loss of body fluids and salts.	> feeling sick, faint, dizzy or confused > headache > heavy sweating > stomach, leg or arm cramps	Cool the person down – move the person to a cool shady area to rest and give them water to drink. Seek medical advice.
Heatstroke: when the body temperature becomes dangerously high and the body is unable to cool itself, due to illness or prolonged exposure to heat.	> high body temperatures (over 40°C) > flushed and very hot skin > confusion and restlessness > headaches and hallucinations	Call 999 and ask for an ambulance. Cool the person – while waiting for help to arrive, move the person to a cool area, remove outer clothing and cover them with a cold wet sheet.
Sunburn: skin damage caused by too much sun exposure.	> red and painful skin (These symptoms can take up to five hours to appear.)	Move the person out of the sun and encourage them to drink sips of cold water. Cool the affected skin with cold water. Calamine or aftersun lotion may soothe the skin.
Hay fever: allergic reaction caused by high pollen levels. Warm, sunny weather can increase pollen levels in the air, so it is important to watch the estimated pollen levels in the weather forecast.	> sneezing > itchy eyes > runny nose	Most symptoms can be treated with medicines called antihistamines which help relieve the symptoms of allergies.

Staying safe

Preparing for a heatwave:

- > Listen carefully for updates on the weather forecast.
- > Plan ahead to reduce the risk of ill health from the heat (e.g. stock up on high-protection suncreams).
- > Make sure you have plenty of bottled water somewhere handy in case of drought or local problems with the water supply.
- > Make sure people you know who may be particularly vulnerable in a heatwave (e.g. grandparents, older neighbours, etc.) are aware of the heatwave and know what to do to stay safe and look after themselves.
- > Ensure you have your medication in stock if you suffer from hay fever.
- > If you have asthma, make sure you have your inhaler(s) with you wherever you go as hot weather could trigger this.

During a heatwave:

- > Stay inside, in the coolest room in your home, as much as possible. On very hot days, you may find splashing yourself with cool water helps keep you cool. If you go out, stay in the shade, apply suncream and wear a hat. Keep out of the heat as much as possible and avoid going out in the hottest part of the day (11 a.m. – 3 p.m.).
- > Keep your home as cool as possible – shading windows and shutting them during the day may help. Open them when it is cooler at night.
- > Avoid too much physical activity – this can cause you to dehydrate (lose water) and can bring on some ill-health effects such as dry mouth, dizziness and headaches.
- > Wear light-coloured, loose-fitting clothes – preferably cotton or linen as they are natural fabrics that will allow your skin to breathe.
- > Contact your doctor, a pharmacist or the NHS if you are worried about your own or someone else's health during a heatwave, especially if you are taking medication, feel unwell or have any unusual symptoms. If you suspect heatstroke, call 999.
- > Eat well-balanced, light and regular meals. Try to not eat too much salty food. Drink plenty of water regularly, even if you don't feel particularly thirsty.
- > Help look out for others in your community – visit or phone people who are less able to look after themselves, such as older neighbours, relatives and friends, and people with health conditions or mobility problems.

Find out more:

NHS Heatwave pages: nhs.uk/Livewell/Summerhealth/Pages/Heatwave.aspx

Met Office Heat Health Watch: metoffice.gov.uk/public/weather/heat-health/#?tab=heatHealth

Public Health England's Heatwave Plan: gov.uk/government/publications/heatwave-plan-for-england

Heatwave checklist

Heatwaves are most common in summer and can have some significant impacts on people's health. Share this checklist with your parents/guardians to help the family stay safe throughout a heatwave emergency.

Before a heatwave:

- ☐ Listen carefully for updates on the weather.
- ☐ Plan ahead to reduce the risk of ill health from the heat (e.g. stock up on high-protection suncreams).
- ☐ Make sure you have plenty of bottled water somewhere handy in case of drought or local problems with the water supply.
- ☐ Make sure people you know who may be particularly vulnerable in a heatwave (e.g. grandparents, older neighbours, etc.) are aware of the heatwave and know what to do to stay safe and look after themselves.
- ☐ Ensure you have your medication in stock if you suffer from hay fever.
- ☐ If you have asthma, make sure you have your inhaler(s) with you wherever you go

During a heatwave:

- ☐ Stay inside and in the coolest room in your home as much as possible. On very hot days, you may find splashing yourself with cool water helps keep you cool. If you go out, stay in the shade, apply suncream and wear a hat. Keep out of the heat as much as possible and avoid going out in the hottest part of the day (11 a.m. – 3 p.m.).
- ☐ Keep your home as cool as possible – shading windows and shutting them during the day may help.
- ☐ Open the windows when it is cooler at night.
- ☐ Avoid too much physical activity – this can cause you to dehydrate (lose water) and can bring on some ill-health effects such as dry mouth, dizziness and headaches.
- ☐ Wear light-coloured, loose-fitting clothes – preferably cotton or linen as they are natural fabrics that will allow your skin to breathe.
- ☐ Contact your doctor, a pharmacist or the NHS if you are worried about your own or someone else's health during a heatwave, especially if you are taking medication, feel unwell or have any unusual symptoms. If you suspect heatstroke, call 999.
- ☐ Eat well-balanced, light and regular meals. Try to not eat too much salty food. Drink plenty of water regularly, even if you don't feel particularly thirsty.
- ☐ Help look out for others in your community – visit or phone people who are less able to look after themselves, such as older neighbours, relatives and friends, and people with health conditions or mobility problems.

What are heatwaves?

Heatwaves in the UK are most common in the summer. Heatwaves happen when it gets much hotter than normal for several days and nights in a row.

You probably enjoy summer and warmer temperatures, but heatwaves can seriously affect people's health, especially if they are vulnerable, such as elderly people, babies and younger children, and people who have serious health problems.

Heatwaves can make us dehydrated because we lose more moisture from our bodies – meaning we need to drink more fluids, especially water. Being too hot can also make us feel sick, faint, dizzy and get headaches. We could also get sunburnt if we are in the sun for too long. People with hay fever can be more affected than usual because the pollen levels in the air can be a lot higher in warmer weather.

To stay safe during a heatwave:

- > Drink lots of water, even if you don't feel thirsty – this will keep you hydrated and help your body to stay cool.
- > Stay inside, in a cool place as much as possible on very hot days.
- > If you go outside, stay in the shade as much as possible, put suncream on and wear a hat. Just make sure to avoid going out in the hottest part of the day – between 11 a.m. and 3 p.m.
- > Do not do too much exercise on hot days as you can get dehydrated.
- > Help look out for others in your community – visit or phone people who are less able to look after themselves, such as older neighbours, relatives and friends, and people with health conditions, to make sure they are okay.

Keep an eye on the weather forecast for updates.

The sun and heat can be great in heatwaves – just remember to drink lots of water, keep covered up and stay cool!

Heatwave health risks: table

Health risk	Definition	What to do
Heat exhaustion		
Dehydration		
Heatstroke		
Hay fever		
Sunburn		

Heatwave health risks: cards

Definition

What to do

Definition: When your body loses more water than it takes in.	What to do: Cool the person down and give them water.
Definition: When your body overheats because of sweating lots.	What to do: Take medicines like antihistamines.
Definition: When your body is too hot and cannot cool down.	What to do: Cool the skin with water and lotion.
Definition: When your skin goes red and is damaged by too much sun.	What to do: Cool the person down and call 999 for medical help.
Definition: An allergic reaction to increased pollen levels.	What to do: Drink lots of water.

Heatwave health risks: answers

Health Risk	Definition	What to do
Heat exhaustion	When your body overheats because of sweating lots.	Cool the person down and give them water.
Dehydration	When your body loses more water than it takes in.	Drink lots of water.
Heatstroke	When your body is too hot and cannot cool down.	Cool the person down and call 999 for medical help.
Hay fever	An allergic reaction to increased pollen levels.	Take medicines like antihistamines.
Sunburn	When your skin goes red and is damaged by too much sun.	Cool the skin with water and lotion.

Experiencing a heatwave: character cards

Character card A

It had been getting hotter over the last few days. I was at school and at playtime we were only allowed outside if we had a hat on and stayed in the shade. My eyes were getting really itchy and tired. I kept sneezing and did not feel well at all.

Character card B

It was a hot summer's day and we were driving to visit some of our family friends. They did not live that far away, but the traffic was really bad on the motorway. It was really hot inside the car even with all the windows down. Suddenly, mum had to pull the car over onto the hard shoulder. The temperature warning had come on that the engine was too hot. We all had to get out onto the side of the road and sit in the shade waiting for the recovery mechanic. Luckily, we had seen on the news that it was going to be hot so we had lots of water with us to keep hydrated.

Character card C

We were on holiday at the beach. The sun was pounding down on us and there wasn't even a slight breeze. We had been playing in the sea and the cold water had kept us cool. We went out of the sea to have our lunch. It was really hot and our swimming costumes dried very quickly. We hadn't put any suncream on since before we went into the sea. I began to feel a bit sick and hot.

Character card D

It had been really hot for a couple of days. It was bedtime but I felt too hot to go to sleep. My dad suggested having a cold shower to cool me down. It did help but I still felt uncomfortable. We opened the windows in my room to cool the room down and pulled the curtains shut to make sure no sun would come into the room the next morning.

Character card E

The weather forecast issued an alert for a heatwave. It was really hot and I didn't feel like I wanted to go outside and play or anything. I stayed inside with a fan and read my book. I was worried about my grandparents. They did not cope well in the heat as they felt more tired and couldn't get out as easily.

Staying cool in a heatwave

It is summer and there is a heatwave. Emma is very hot.

Write down three top tips to help her stay cool.



Staying cool in a heatwave: answers

It is summer and there is a heatwave. Emma is very hot.

Write down three top tips to help her stay cool.

Keep hydrated – drinking plenty of water.

Don't go outside between 11 a.m. – 3 p.m.



Stay inside in a cool room or in the shade.

Keep the curtains closed to keep the sunlight out of the house.

Wear light, loose-fitting clothes made of natural fabrics.

Splash yourself with cool water.

Wear a hat to keep the sun off your head.

Heatwave word search

Find the following words in the word search.

hot
pollen
sun
heatwave

suncream
shade
summer
headache

Q	S	W	R	S	T	Y	I	O
S	U	P	O	L	L	E	N	E
U	M	N	E	W	F	N	H	M
N	M	S	C	E	N	C	D	Y
C	E	U	R	B	A	R	G	I
R	R	N	Q	D	K	H	O	T
E	L	Y	A	B	P	O	Y	T
A	L	E	C	S	H	A	D	E
M	H	E	A	T	W	A	V	E

Heatwave word search: answers

Find the following words in the word search.

hot
pollen
sun
heatwave

suncream
shade
summer
headache

Q	S	W	R	S	T	Y	I	O
S	U	P	O	L	L	E	N	E
U	M	N	E	W	F	N	H	M
N	M	S	C	E	N	C	D	Y
C	E	U	R	B	A	R	G	I
R	R	N	Q	D	K	H	O	T
E	L	Y	A	B	P	O	Y	T
A	L	E	C	S	H	A	D	E
M	H	E	A	T	W	A	V	E