



ADVERTISEMENT

Magazine

How do you recover from being struck by lightning?

By Denise Winterman
BBC News Magazine

🕒 9 August 2013 | [Magazine](#)



Summer storms often result in thunder and lightning. Every year a small number of people die from being hit, but what about those who survive?

Lightning is a discharge of static electricity that occurs when there is an imbalance in the electrical charge between the cloud and the earth's

In today's Magazine

What's it really like to work at McDonald's?

How well do you know your campaigns?

Is there really such a thing as 'the women's

surface.

Put very simply, it is a giant electric spark in the sky - a very powerful one. It can stop a person's heart and cook their internal organs.

On average three people die in the UK each year from lightning strikes, according to the Royal Society for the Prevention of Accidents (Rospa). In the US, **deaths have been in decline** but are still in the region of 30 a year. More than 85% of those killed are male.

In the UK, up to 60 people every year get struck and survive, but it's estimated that more than three-quarters of them suffer some form of permanent disability.

vote'?

Why did giant fish hurl themselves at rowers?

Find out more

- **Dara O Briain's Science Club** is on Thursday 8 August on BBC Two at 20:00 BST. It continues throughout August

Or catch up later

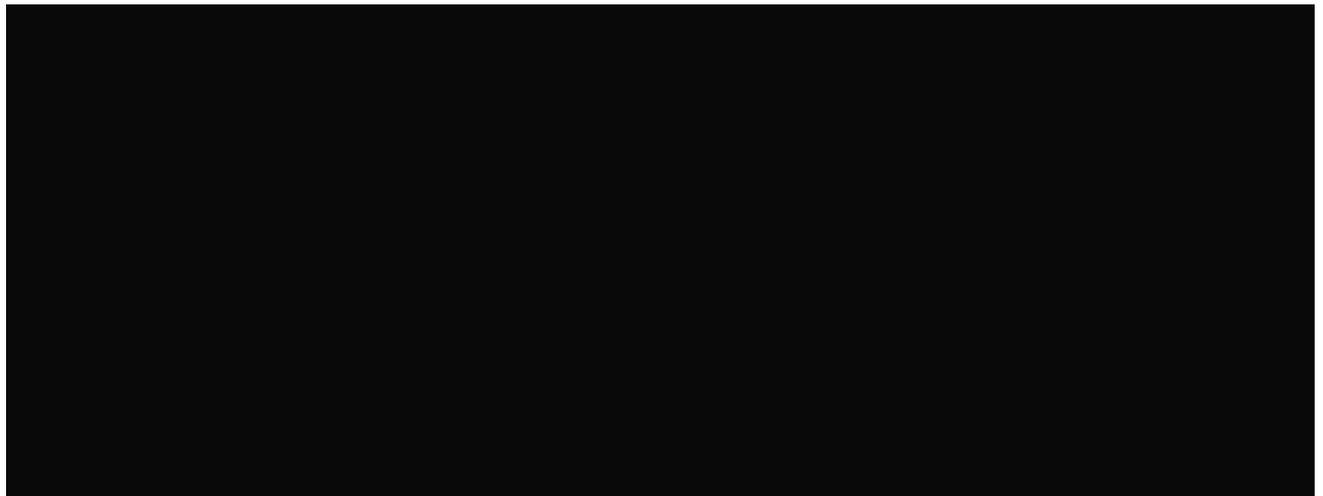
via iPlayer

ADVERTISEMENT

So what is life like after being struck by lightning?

Eric Brocklebank, then 64, was struck on 9 June 2009 as he boiled sausages for a group of cadets at an event at RAF Digby.

He had just removed a metal barbecuing prong from the water and was holding it in the air when the strike happened.





Lightning bolt injuries typically leave distinct burns on the skin

'Lightning trees'

- Lichtenberg figure - also known as "lightning tree"

or "lightning
flower" - is red,
branching
electric
discharge
pattern that
occurs on the
skin of strike
victims

- Marks formed when delicate capillaries beneath skin rupture from shock of electrical discharge
- Usually appear within hours of incident and disappear within days; tend to occur on upper body
- Named after 18th Century physicist Georg Christoph Lichtenberg who

described
similar pattern
while
experimenting
with static
electricity

Source: APS
Physics



"A bolt of lightning came straight through the gap in the tent. It hit the fork I was holding. That melted into my hand."

With lightning strike victims you can sometimes guess at the path of the electricity because

of the formation of a Lichtenberg figure. Sometimes known as "lightning tree" or "lightning flower", these intricate, fern-like patterns are caused by capillaries bursting.

In Brocklebank's case, the lightning first caused a small wound in his wrist.

"Then it went down the right side of my body, across my hips and down through my left and right legs. It blew three holes in my right foot and two holes in my left foot."

He was lucky to be surrounded by people who were able to help.

"As luck had it, all of the cadets knew CPR. One of the first people down there was my son. The first responders then worked on me for 20 minutes."

More than three-quarters of lightning survivors



“

[The bolt] blew three holes in my right foot and two holes in my left

Eric Brocklebank

suffer some form of permanent disability.

For Brocklebank, the consequences, four years after the strike, are both physical and mental.

He has scar tissue on his lungs and can be easily left short of breath. Sometimes his mobility is fine but occasionally he has to resort to a wheelchair. He is grateful for all the doctors and nurses who have worked on him over the years.

"I've had numerous exploratory examinations. I try to put a brave face on it. I'm not a person who lets things get me down." He has retired from his job as a designer of X-ray systems, but still occasionally works. On one hospital visit he was told: "We don't normally treat people with so many different problems."

Men are four times as likely to

Where does lightning come from?

Most lightning forms in the lowest portion of Earth's atmosphere known as the troposphere.

It either travels between clouds or from the clouds to the ground as fork lightning.

Lightning can also form in the ash clouds of **volcanoes**

Explore the mysterious world of Earth's atmosphere

be struck as women, says Rospa. This is believed to be because men are statistically more likely to be outdoors. Golfers are probably at greatest risk, because they are likely to be caught in the open far from shelter.

There are three types of lightning strike. A direct strike is when it hits you and goes to earth through you. A side flash is when it hits another object and jumps sideways to hit you. A ground strike is when it hits the ground then travels through it hitting you on the way.

Most people understand the dangers of being on open ground on water or near trees during the height of the storm. But there can still be danger before the storm is apparent and after it appears to have finished.

Most alarmingly, Brocklebank recounts how his house was later struck by lightning, damaging his television and

Safety tips when lightning strikes



- Seek shelter inside a large building or a car

causing him to be treated for shock. He is understandably anxious in stormy weather.

"I'm told lightning only strikes once. I'm told it's an act of God," he says.

*You can follow the Magazine on **Twitter** and on **Facebook***

Get out of wide, open spaces and exposed hilltops

- If you have nowhere to shelter, make yourself as small a target as possible by crouching down with your feet together, hands on knees and head tucked in
- Do not shelter beneath tall or isolated trees
- If you are on water, get to the shore and off wide, open beaches as quickly as possible
- Studies have shown that proximity to water is a

common factor
in lightning
strikes

Source: [Rospa](#)

[Discover more
about the Earth
and its weather](#)

[What exactly is
climate?](#)

[Watch BBC
Weather's Alex
Deakin explain
the science of
summer storms](#)

Share this story About sharing



In today's Magazine

**What's it really like to work at
McDonald's?**

15 April 2015

**How well do you know your
campaigns?**

15 April 2015

Is there really such a thing as 'the women's vote'?

14 April 2015

From the Monitor

Why did giant fish hurl themselves at rowers?

14 April 2015

News from Elsewhere

Russia blocks release of Child 44

15 April 2015

More Magazine stories >



Fries with that

🕒 15 April 2015



Election quiz

🕒 15 April 2015



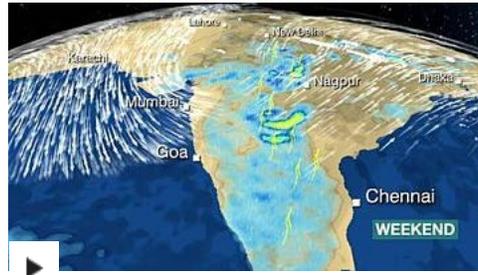
Majority verdict

🕒 14 April 2015

More Videos from the BBC



Cool runnings - North Pole marathon



Severe storms threaten India



Haiti battered by storm



Deadly spring storm blasts Europe



US braces for more severe weather



California drought goes from bad to worse

Recommended by Outbrain

Elsewhere on BBC

Sellers using fake identities online to conceal illegal trade of puppies

BBC News

World fails to reach millennium education targets

BBC News

Peterborough grooming trial: Mohammed Khubaib guilty of sex offences on girls

BBC News

Keys to The Kingdom: The slow rise of Saudi women

BBC Capital

A generation of cyberslackers

BBC Capital

In New York, a Mercedes-Benz hat trick

BBC Autos

Recommended by Outbrain

Top Stories

EU accuses Google of

Ex-NFL player guilty of

search 'abuse'

The European Union's competition commissioner says Google has abused its dominance of search to promote its Shopping service.

🕒 3 hours ago

murder

🕒 24 minutes ago

US to exhume Pearl Harbor remains

🕒 15 April 2015

Features & Analysis



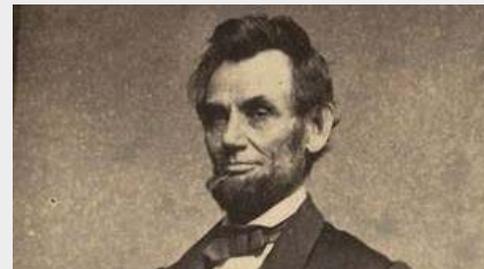
Act of kindness

Note to hungry person prompts crowdfeeding campaign



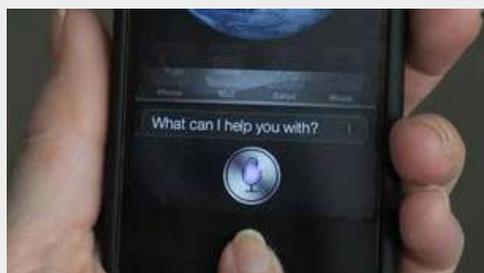
Fries with that?

What's it really like to work at McDonald's?



Enduring Abe

The many faces of a famous president



Nearest gay bar?

Russian language Siri accused of



Bloods and Crips

How 30 years of LA gang bloodshed

homophobia

came to an end



30 years on

Was Hagler-Hearns the greatest ever fight?



Crafty idea

Can DIY-marketplace Etsy keep its soul?



Close shaves

When competitive cyclists won't stop for trains



Cheryl's Birthday

The maths question that's baffling the world

Most Popular

Read

Watched

Record dive rescues sunken treasure

1

Finns aren't what they used to be

6

Ex-NFL player guilty of murder	2	An act of culinary kindness	7
Coloured Pluto comes into view	3	Malawians to be evacuated from SA	8
Hacking warning for US flight wi-fi	4	SpaceX nearly recovers rocket	9
US to exhume Pearl Harbor remains	5	Asiana plane skids off Japan runway	10

Elsewhere on the BBC



Earth quiz

Can you guess what weird and wonderful things are in these 15 photos?

From Around the Web

[These Gigabit Cities Will Be Our Next High-Tech Hubs](#)

HP Matter

[The Hyades Supercomputer: Discovering, Storing, And Sharing Secrets Of The Stars](#)

Huawei on Forbes

[15 Outrageous Things Found On Goole Maps That Will Upset You](#)

Viral Nova

[Homeless Woman's Kindness Toward Dog Pays Off for Both of Them](#)

Vetstreet



[↗ This is How Cruise Ships Rip you Off Once You're Aboard](#)
Destination Tips

[↗ What the new Ford Mustang says about modern horsepower](#)
Ford on Supercompressor

Promoted content by Outbrain

Ads by Google

Tour Beautiful Italy

100% Stress Free Travel to Italy. Including Air, Hotels & More!
www.italy.goaheadtours.com

UK Expat Mortgages

UK Mortgages - Up To 85% Value! Quick Quotes - Enquire Online Now.
liquidexpatmortgages.com

Medicare Supplement Plans

Medigap Options for (65 & older). Compare Plans & Prices for 2015.
www.medicare Supplemental.com

Sections

[Home](#)

[Video](#)

[World](#)

[US & Canada](#)

[UK](#)

[Business](#)

[Tech](#)

Science

| Magazine

Entertainment & Arts

Health

In Pictures

Also in the News

Special Reports

Explainers

The Reporters

Have Your Say

BBC News Services

 On your
mobile

 On your
connected
TV

 Get news
alerts

 Contact BBC
News

Explore the BBC

News

Sport

Weather

Shop

[Earth](#)

[Travel](#)

[Capital](#)

[Culture](#)

[Autos](#)

[Future](#)

[TV](#)

[Radio](#)

[CBBC](#)

[CBeebies](#)

[WW1](#)

[Food](#)

[History](#)

[Learning](#)

[Music](#)

[Science](#)

[Nature](#)

[Local](#)

[Full A-Z](#)

[Terms of Use](#)

[About the BBC](#)

[Privacy Policy](#)

[Cookies](#)

[Accessibility Help](#)

[Parental Guidance](#)

[Contact the BBC](#)

Copyright © 2015 BBC. The BBC is not responsible for the content of external sites. **[Read about our approach to external linking.](#)**