

How to survive ANYTHING

Lifts plunging, snakes biting, cars hanging off cliffs... It's a scary world out there (well, in our overactive imaginations, at least). But even as the world gets safer, we still insist on hanging on to fears we know are irrational. So we've compiled a guide to how you can make it through any imaginable disaster...

BY RACHEL SULLIVAN



YOU'RE ATTACKED BY A SHARK

Why you shouldn't fret... Because statistically, you're more likely to get struck by lightning – your odds of being attacked by a shark are just one in 11.5 million. Still think you possess that kind of bad luck? Avoid New Smyrna Beach, Florida – it's the place in the world with the most recorded shark attacks. Humans aren't actually especially tempting for sharks – our flesh isn't high enough in fat to meet their stringent energy requirements. However, if you *are* swimming in a known risk area, biologists suggest lots of ways to prevent an attack – don't wear shiny jewellery, as it resembles the glinting of fish scales; don't swim when you've got a cut or you're menstruating – sharks' ability to smell blood is incredibly

acute; try not to splash; and wear a swimsuit close in colour to your skin that covers up visible tan lines – odd fact: sharks' eyes are very sensitive to contrast.

But if it did happen...

Don't believe what you see in Hollywood films, says Josh Piven, author of the best-selling *Worst-Case Scenario Survival Handbooks* and world authority on all things disastrous. "It's a misconception you see in films all the time – people hitting a shark on the nose to fight it off. In fact, you should go for the gills or the eyes." Make sharp, repeated jabs in these areas – sharks, like most predators, are inherently lazy and like an easy kill. This tells the shark you are not defenceless, and may persuade it to leave you alone.

YOUR CAR BREAKS DOWN IN THE DESERT

It won't happen... Because of course you'll have had your car checked out thoroughly by a mechanic before embarking on such a trip.

But if it did... Forget notions of traipsing across sand dunes looking for a tribe of desert nomads. "Stay with your car, as this will make it much easier for rescuers to see you," says Ross Bowyer, who in his job as a trainer for Bushcraft Expeditions leads trips to the desert, jungle, Arctic and Canadian wilderness and shows people how to survive there (visit bushcraftexpeditions.com). "Hopefully you will have prepared and your car will be filled with water, food and shelter. If not, you need to look for water in an arid environment – a very hard task. Water may be found by digging down in old riverbeds and putting plastic bags around tree branches and collecting the water that condenses. Reduce the water you lose by resting during the hottest part of the day, and breathe through your nose – this reduces water lost through respiration."

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YOU'RE IN A LIFT PLUNGING DOWNWARDS

First, the good news... "The elevator plunge is something you see a lot in movies," says Piven, "but it is actually extremely unlikely to happen. In fact, you can forget flying – in terms of fatalities per number of miles travelled, elevators are about the safest means of transport imaginable."

Though if it did happen... It might not be quite what you'd expect. "Oddly, because of the way elevators are counterweighted, they're actually more likely to plunge *upwards* than downwards. The only way they could really fall is if the entire cab got severed, something that's incredibly unlikely." To give you an idea of

just how unlikely, the last time that happened was back in 1945 when a plane crashed into the Empire State Building, severing the lift cable. If it did happen, though, the worst thing you could do is try and open the doors; instead, squat in a corner or lie down flat to minimise the impact if you come to an abrupt stop. →



YOU'RE CAST ADRIFT IN A BOAT

It probably won't happen... Because this is only really a danger if you're the kind of person who's likely to go yachting across the Atlantic – ie, sailing at quite a committed level.

But if it did... Bad luck: you're in for a tough ride, reckons Bowyer. "This must be one of the hardest places to survive: you have very little control over your environment. However, people have survived for months drifting in life rafts by collecting rainwater, drinking turtle blood, getting fluid from fish eyes and sucking fluid from fish spines (these have a small chamber filled with

a drinkable liquid). The raft provides shade and shelter for small fish which attract bigger fish who predate on them, so if you have the ability to catch them (hook and line, safety pin or spear), getting food should be relatively straightforward. Hanging strips of fish up to dry will preserve them for the times you fail to catch food." So what marks out the people who manage to make it through such a challenging, horrendous situation? "It comes down to three things," says Bowyer. "Determination – which can be anything from religion to a desire to see friends and family again – adaptability, and a good helping of luck."



YOUR CAR PLUNGES OFF A BRIDGE

Why you're safer than you think... Bridge railings are designed with height and strength requirements to stop cars falling off, and effectively so: only 0.1 per cent of all US 2004 car fatalities were caused by immersion in water, says the National Highway Traffic Safety Administration.

But just in case... Some safety experts recommend driving with windows slightly open whenever you are near water or on ice. However, even Piven, who has

spent more time thinking about disaster scenarios than most of us will in a lifetime, admits even *he* doesn't do this. Your best bet is to open or break the window and get out before the car is submerged. But if you do not manage this, you have one final option: wait until the car starts filling with water. When the water reaches your head, take a deep breath and hold it. Once the car's full, the pressure should be equalised inside and out, and you should be able to open the door and swim out.

A TERRORIST TAKES CONTROL OF YOUR PLANE

Don't believe the hype... "In the US, a lot of the fear of terrorism was fanned by the last government – for their own purposes," Piven says. "The possibility of a terrorist attack is always there, but it's a remote possibility. Terrorists aren't as sophisticated as we think they are. So I think this is not something to worry about every day." In fact, bulletproof cockpit doors, air marshals and increased airport security all help make a hijacking on the scale of September 11 increasingly unlikely.

But in the unlikely event... There is no straightforward right thing to do in this situation. Pilots were once trained to adopt the FAA-approved 'Common Strategy' tactic, which taught crew members to comply with hijackers' demands, not to make any 'heroic' moves and ask passengers to sit quietly until they could land the the plane safely. September 11 changed all that, and passengers must now calculate the risks of passive cooperation: an example of active passenger resistance occurred in December 2001, when passengers helped prevent 'shoe-bomber' Richard Reid from igniting his explosives. Should the worst happen and you end up in a crash, you may be interested to know that a higher percentage of crash survivors sit in the rear half of the plane than the front; survivors tend to listen to the safety briefings; aisle and emergency exit seats offer the best odds of escape; and due to the high risk of having to climb over debris and through fire, you're better off flying in solid shoes and clothes made of natural fibres.



YOU'RE BITTEN BY A SNAKE

There is good news... People dying of snake bites is extremely rare. Survival expert Ross Bowyer agrees: "Most snakes will only bite as a last resort and would much rather avoid humans." Consider the numbers – the adder is the UK's solitary venomous snake, and there are only 100 cases of adder bites reported a year. And even in Australia, home to more poisonous snakes than anywhere else in the world, there is only an average of one fatal snake bite a year.

But should the worst happen... Got ideas about heroically sucking venom out of the bite? Forget it. If you have any small cuts on your gums or

in your mouth, this gives the venom a fast-track way into your bloodstream. "Stay still and try to relax," says Bowyer. "A quick heartbeat will increase the blood flow and move the poison around faster. And do *not* try to cut the poison out." Your best save-yourself tool? Your car keys. Snake bites are very rarely fatal, and as long as you get to medical help – fast – you should be fine. Try to remember what the snake looked like so the doctor can prescribe the correct anti-venom (for example, a diamond-shaped head means it's a viper) but *don't* try to kill or catch it, and resist the temptation to ice the bite – this will make removing the venom more difficult.

YOU'RE STRANDED ON A DESERT ISLAND

It's unlikely unless... You're starring in an episode of *Lost*.

But should it somehow happen... A handy rhyme for setting priorities in this situation (none of which, sadly, involve Josh Holloway): Please (Plan) remember (Rescue) what's (Water) first (Food). "If you are not injured, the

first thing you should do is make a plan," explains Bowyer. "This gives you a focus and keeps your mind busy. Make a big SOS signal fire on the beach, or search for reflective surfaces to act as a signal mirror. Next, water. You mustn't drink seawater so you have to look for streams, coconuts (each contains a litre of fresh, sweet water), trapped rainwater in leaves and rocks." You

could also try this method of collecting dew – tie rags around your ankles, walk through grass at sunrise, squeeze out, drink. Food, though, is unlikely to be a problem. "There will be plenty of sea birds and eggs," continues Bowyer, "while coconuts are usually common and provide food as well as water. Crabs are easily speared and if you can fish, you'll never go hungry." ➔

YOU'RE DRIVING ALONE AND THE BRAKES FAIL

Good to know... If you have your car serviced regularly and pay attention to the brake warning light on your dashboard, this should never happen.

But if it did... First, pump your brakes. This may rebuild enough pressure in your braking system to allow you to stop. If that doesn't work, engage your handbrake – slowly – trying to gradually decrease your speed, and shift down through your gears. As a last resort, use friction to slow your car – a hedge or guardrail, say. Maintain contact until you stop. Whatever you do, *don't* be tempted to do a James Bond-style jump from the moving car – "unless," according to *The SAS Survival Guide*, "you are headed for a cliff or other substantial drop and you know you will not survive the impact."

"Don't attempt to jump from a moving car unless you are headed for a cliff and you know you will not survive the impact"

YOU'RE KIDNAPPED AND HELD FOR RANSOM

Consider the odds... Even though, statistically, kidnapping is on the rise worldwide, the UK is low in the world kidnapping league tables (top five abduction hotspots: Colombia, Mexico, the former Soviet Union, Brazil and the Philippines). The current crime trend is – rather than an open-ended capture for ransom – for ‘quicknapping’, during which a victim is abducted for a short time, taken to cash machines and forced to hand over cash before being released.

But if it does: “Try to build a rapport with the hostage taker – even empathise with them,” says Chris Ward, who works for Training For Success (tfsuccess.com), a company that helps educate at-risk people such as bank employees on how to deal with situations like this. “If you argue, it makes them more likely to use violence against you. But if you show you understand them it makes it more difficult for them to do whatever they might have been thinking about doing.”



YOU'RE AT THE BANK AND A GUNMAN ENTERS

On the plus side... Most of our towns and cities – and especially our banks – are now so heavily protected by CCTV that help is likely to come quickly. That said, emergency situations involving human beings are, in fact, the ones worst-case scenario expert Piven admits he fears more than any other. “Animals typically act in predictable ways – obviously if you see a wild animal and you corner it you’re

increasing your chances of being attacked – but with people it’s much more difficult to predict how they’re going to behave.”

If you do get cornered... Your best bet when faced with someone pointing a gun at you is to comply, says Ward. “If someone holding a gun asks you to do something, repeat it back to them so you’re sure you understand it *exactly* and

they know you are just doing what they’ve asked. Often in robberies, someone will ask for your wallet, and if you put your hand straight in your pocket they might think you are going to attack – and you might get hurt.” As for heroic attempts to outwit or disarm the robber? Best not, he thinks. “Concentrate your effort on getting a description of the person, and trying as hard as you can to memorise it.”

YOU'RE DROWNING IN QUICKSAND

Don't panic! “Very few people have ever drowned in quicksand,” says Bowyer. Found mainly in marshy, boggy areas or by the coast, quicksand forms when sand becomes saturated with water and can no longer support any weight, meaning a person stepping on it will start to sink. Because of the higher density of the quicksand, it’s almost impossible for a human to sink completely below the surface; however, it’s extremely hard to pull yourself out, as you have to work against the vacuum left behind. This means a major danger of being trapped, then suffering dehydration and sun exposure or being drowned by returning tides (as has been known to happen at Morecambe Bay, which is notorious for its quicksand).

And if it did... The less you move, the better. “Carry a long stick or a length of rope and, if possible, travel in pairs,” says Bowyer. “Then, your buddy can use it to pull you free. If you are by yourself, do not fight or struggle. With very slow movements try and get your arms out, then slowly pull yourself onto the surface – by spreading your weight you will be less likely to sink back in.” Once you’re floating (note: you are more buoyant in quicksand than you are in water), try to slide your legs out and shuffle-swim to safety until you reach firm ground.

TEST YOUR SURVIVAL IQ

Take our quiz to find out how useful you are in a life-or-death situation...

- 1** You're on a yachting holiday and, while keeping night watch, you fall off the boat – and the water's cold. Fortunately, you're wearing a life jacket. Unfortunately, you can't see anything to swim to. Which of these is your best bet for staying alive until you are rescued?
 - a) Take off your outer layers of clothing – this will enable you to swim more effectively.
 - b) Move as much as you possibly can to keep your body temperature up.
 - c) Curl up into a ball with your knees drawn to your chest.
- 2** While walking in the Canadian Rockies, you stumble upon a bear. What should you do next?
 - a) Lie down, stay still and hope it decides not to attack.
 - b) Climb the nearest tree.
 - c) Wave something aggressively to scare the bear off.
- 3** While climbing the Andes, you notice that a mountain lion is watching you. What should you do?
 - a) Run as fast as you can.
 - b) Crouch down and try to look small and unthreatening.
 - c) Pull your coat out wide, wave your hands and hold your ground – maybe you'll frighten it away.
- 4** While out night-hiking, you get stranded. Which of these facts must you deal with most urgently?
 - a) You've got no water.
 - b) You've got no food.
 - c) It's freezing cold.
- 5** You've run out of fresh water. Which of these must you *never* drink as a last-ditch attempt to stay alive?
 - a) Distilled sea water
 - b) Distilled blood
 - c) Distilled urine
- 6** According to the odds, which of these is most likely to cause your death?
 - a) Falling over
 - b) A tsunami
 - c) An asteroid
- 7** Oh no, you've fallen into a sewer. What's your best course of action?
 - a) Light a match to see better so you can decide what to do next.
 - b) Try and work out where the most rats are – and go in the other direction.
 - c) Head upstream.
- 8** Oh lord, you're on a lovely holiday and a volcano has erupted nearby. What should you do?
 - a) Get in your car and try to drive as far away as possible.
 - b) Lie down close to the ground – heat rises, so you'll be safer there.
 - c) Get indoors and stay there, going to the highest floor possible.
- 9** You've got a leech feeding on your arm. What's the first thing you should do?
 - a) Apply heat to remove the leech – a naked flame will do.
 - b) Flick the small end of the leech with your finger to detach its sucker.
 - c) Spray the leech with insect repellent if you have it, salt if you don't. ■

ANSWERS

- 1 (c)** Curling up can slow heat loss by up to 50 per cent. In frigid water, clothes act like a wetsuit and keep warmer water close to you. Keep movement to a minimum, as increasing your heart rate actually speeds body cooling – swim only if you can see land, a boat or a floating object within 50 yards.
- 2 (a)** The odds are that the bear will leave you alone if you stay put and don't provoke it. Never climb a tree to escape a bear – contrary to what many people think, bears can climb trees easily and will chase you.
- 3 (c)** The larger and better able to defend itself an animal is, the less likely a lion will attack it. Running will bring out its predatory instincts, while crouching down will make it think you are an easy kill. Back away slowly, or wait until it moves away.
- 4 (c)** Why? You should follow the 'rule of three' to help set survival priorities, namely: humans cannot survive more than three minutes without air; more than three hours exposed to extremely low temperatures; and more than three days without water; and the sewage gets, producing more hydrogen sulfide, which could be deadly.
- 5 (a)** According to a study published by *Live Science*, this is the seventh most likely cause of death over a lifetime, well behind heart-toppers heart attack, cancer, stroke and suicide. Interestingly, your odds of being struck by an asteroid are actually higher than of being caught in a tsunami – strange, but true.
- 6 (a)** Yep, prosaically, it's a). According to a study published by *Live Science*, this is the seventh most likely cause of death over a lifetime, well behind heart-toppers heart attack, cancer, stroke and suicide. Interestingly, your odds of being struck by an asteroid are actually higher than of being caught in a tsunami – strange, but true.
- 7 (c)** The air in sewers is full of hydrogen sulfide, a gas that can be combustible in large amounts, so avoid using an open flame. The presence of rats in large numbers is actually a good thing – it means the air is safe to breathe (though no one's suggesting that breathing it will be a pleasant experience). You should move upstream as the further downstream you go, the older For, as Mark Twain said, "The calamity that comes is never the one we had prepared ourselves for."
- 8 (c)** You know what they say about cats having nine lives? You're the opposite. Buy *The SAS Survival Handbook* immediately.
- 9 (b)** Annoying a leech with heat, salt or chemicals while it is feeding will cause it to regurgitate, spreading bacteria from its digestive system into your arm and causing infection. You want to dislodge the small sucker first, then the big one at the other end. The leech may reattach to your finger but you should then be able to flick it away quite easily.

HOW DID YOU DO?

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