

HEALTH

Human Limits A 64-year-old Duluth woman fell on the ice last December. Arthritis kept her from getting up. She lay in the snow for hours. Her temperature dipped to 70°F. Her heart stopped. She should have been a goner. But doctors revived her; today she is fine. Medical science is always learning more about how much a body can take. Yet as Duke University physician Claude Piantadosi notes, "At some point it's impossible to rescue yourself." Here's current thinking on the extremes of human endurance. —Shelley Sperry

107.6°F



Body Heat

When core body temperature hits 107.6°F, heatstroke can't be reversed and will prove fatal.

40°F



Cold Water

Water saps body heat. You'd last barely 30 minutes in a 40°F sea. Life vests buoy you up to slow heat loss.

300°F



Hot Air

In a burning building or deep mine, adults can take 10 minutes at 300°F. Kids soon succumb in a 120° car.

15,000 feet



High Altitude

Consciousness fades for most. With bigger lungs and more red blood cells, highland dwellers are OK.

282 feet



Diving Deep

Without equipment, most folks black out before 2 minutes and below 60 feet. The best free diver made it to 282 feet.

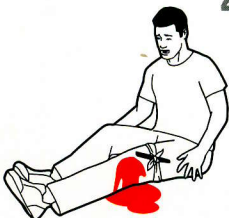
11 minutes



Lack of Oxygen

Typically, you'd pass out within 2 minutes. With training, people can hold their breath nearly 11 minutes.

40%



Blood Loss

You can survive after spilling 30 percent. At 40 percent, you'd need an immediate transfusion.

45 days



Starvation

Lose 30 percent of body weight and death is imminent, though disease will likely kill you before you starve.

7 days



Dehydration

Every cell needs water. Replace the quart or so you lose daily, or you won't last much more than a week.