Source A: Biodiversity Is Important to Human Welfare." *Biodiversity*. Ed. Louise Gerdes. Detroit: Greenhaven Press, 2010. At Issue. Rpt. from "Spice of Life." *World Conservation*. 2008. *Opposing Viewpoints in Context*. Web. 24 Oct. 2014

Biodiversity

Comprising governments, non-governmental organizations, and scientists worldwide, the International Union for Conservation of [Nature](http://ic.galegroup.com/ic/ovic/ViewpointsDetailsPage/ViewpointsDetailsWindow?failOverType=&query=&prodId=OVIC&windowstate=normal&contentModules=&display-query=&mode=view&displayGroupName=Viewpoints&limiter=&currPage=&disableHighlighting=false&displayGroups=&sortBy=&search_within_results=&p=OVIC&action=e&catId=&activityType=&scanId=&documentId=GALE%7CEJ3010602204&source=Bookmark&u=rosw82806&jsid=9ed3d82067316afe8d19a8d9b1c415df) (IUCN) promotes pragmatic solutions to environmental problems, particularly in the developing world.

[Biodiversity](http://ic.galegroup.com/ic/ovic/ViewpointsDetailsPage/ViewpointsDetailsWindow?failOverType=&query=&prodId=OVIC&windowstate=normal&contentModules=&display-query=&mode=view&displayGroupName=Viewpoints&limiter=&currPage=&disableHighlighting=false&displayGroups=&sortBy=&search_within_results=&p=OVIC&action=e&catId=&activityType=&scanId=&documentId=GALE%7CEJ3010602204&source=Bookmark&u=rosw82806&jsid=9ed3d82067316afe8d19a8d9b1c415df) is necessary for physical, cultural, and spiritual survival. Humans depend on biodiversity not only for food and shelter but also for relaxation and inspiration. Unfortunately, many people have become so far removed from nature that unsustainable development and [consumerism](http://ic.galegroup.com/ic/ovic/ViewpointsDetailsPage/ViewpointsDetailsWindow?failOverType=&query=&prodId=OVIC&windowstate=normal&contentModules=&display-query=&mode=view&displayGroupName=Viewpoints&limiter=&currPage=&disableHighlighting=false&displayGroups=&sortBy=&search_within_results=&p=OVIC&action=e&catId=&activityType=&scanId=&documentId=GALE%7CEJ3010602204&source=Bookmark&u=rosw82806&jsid=9ed3d82067316afe8d19a8d9b1c415df) continue unabated, posing a serious threat to the biodiversity necessary to human welfare. Media-driven doomsday attitudes add to the problem by making it more difficult to deliver the message that efforts to reduce biodiversity loss are necessary.

Take your pick: A world in which we all dress the same, speak the same language, eat the same food and listen to the same music. All our natural areas are ploughed up for roads, buildings and corn plantations, and all that's left of wildlife are battery-farmed chickens and dairy cows—a world without diversity.

Or, a world that is prosperous, peaceful, healthy, colourful, vibrant and resilient—in short, a diverse and sustainable world.

<http://ic.galegroup.com/ic/ovic/ViewpointsDetailsPage/ViewpointsDetailsWindow?failOverType=&query=&prodId=OVIC&windowstate=normal&contentModules=&display-query=&mode=view&displayGroupName=Viewpoints&limiter=&currPage=&disableHighlighting=false&displayGroups=&sortBy=&search_within_results=&p=OVIC&action=e&catId=&activityType=&scanId=&documentId=GALE%7CEJ3010602204&source=Bookmark&u=rosw82806&jsid=9ed3d82067316afe8d19a8d9b1c415df>

Source B: Bryant, Charles W.. "Are humans wired to survive?" 12 August 2008. *HowStuffWorks.com*. <http://adventure.howstuffworks.com/survival/wilderness/wired-for-survival.htm> 27 October 2014.

**Are Humans Hardwired for survival by** by [Charles W. Bryant](http://adventure.howstuffworks.com/survival/wilderness/charles-w-bryant-author.htm)

So are humans wired to survive? It sure seems like it. There are many examples of hard-wired human instincts that help keep us alive. Perhaps the most obvious case is the [**fight-or-flight**](http://science.howstuffworks.com/life/inside-the-mind/emotions/fear.htm) response, coined by Harvard University physiologist Walter Cannon in 1915. When humans are faced with danger or stress, a biological trigger helps us decide whether to stay and fight or get the heck out of there -- flight.

When we're stressed or staring danger in the face, the brain's **hypothalamus** is activated. It initiates a series of chemical releases and [nerve](http://health.howstuffworks.com/human-body/systems/nervous-system/nerve.htm) cell responses that gets us ready for the impending scenario. [Adrenaline](http://entertainment.howstuffworks.com/arts/circus-arts/adrenaline-strength.htm) is released into the [blood](http://health.howstuffworks.com/human-body/systems/circulatory/blood.htm) stream, our heart rate increases, blood is pumped more quickly into our muscles and limbs. Our awareness, sight and impulses all intensify and quicken. You can thank our [caveman](http://history.howstuffworks.com/historical-figures/cave-dweller.htm) ancestors for this one. Early man faced a lot of dangers, and the fight-or-flight response evolved to help them evade or battle those dangers in order to survive. Today, it's what allows an ordinary Joe to rush into a burning building or a mother of three to lift a car off of one of her children -- a phenomenon known as **hysterical strength**. It also helps us out in non-life threatening situations like a boss screaming in your face or possibly fleeing -- or getting involved in -- a barroom brawl.

<http://adventure.howstuffworks.com/survival/wilderness/wired-for-survival.htm>

Source C: Chomsky, Noah. “The Dimming Prospects for Human Survival.” *Alternet.org*. 2014. 1 April, 2014. One might even take a speech of President Obama's two years ago in the oil town of Cushing, Okla., to be an eloquent death-knell for the species.

He proclaimed with pride, to ample applause, that "Now, under my administration, America is producing more oil today than at any time in the last eight years. That's important to know. Over the last three years, I've directed my administration to open up millions of acres for gas and oil exploration across 23 different states. We're opening up more than 75 percent of our potential oil resources offshore. We've quadrupled the number of operating rigs to a record high. We've added enough new oil and gas pipeline to encircle the Earth and then some."

The applause also reveals something about government commitment to security. Industry profits are sure to be secured as "producing more oil and gas here at home" will continue to be "a critical part" of energy strategy, as the president promised.

The corporate sector is carrying out major propaganda campaigns to convince the public that climate change, if happening at all, does not result from human activity. These efforts are aimed at overcoming the excessive rationality of the public, which continues to be concerned about the threats that scientists overwhelmingly regard as near-certain and ominous.

To put it bluntly, in the moral calculus of today's capitalism, a bigger bonus tomorrow outweighs the fate of one's grandchildren.

What are the prospects for survival then? They are not bright. But the achievements of those who have struggled for centuries for greater freedom and justice leave a legacy that can be taken up and carried forward - and must be, and soon, if hopes for decent survival are to be sustained. And nothing can tell us more eloquently what kind of creatures we are.

<http://www.alternet.org/print/visions/noam-chomsky-dimming-prospects-human-survival>

Source D: Potts, Rick and Sloan, Chris. “Survival of The Adaptable.” What Does it Mean to Be Human. *National Geographic*, 2010. Web Oct 27, 2014 *Smithsonian Institution* online.

One of the basic principles of biology, therefore, is that adaptations emerge as

organisms face the ongoing tests of survival in their surroundings—finding food,

avoiding predators, attracting mates, warding off the cold, and locating shelter.

**ADAPTIVE CHALLENGES**

Our species, *Homo sapiens,* is recent on the evolutionary scene, having first

appeared only about 200,000 years ago. Although all earlier hominins are now

extinct, many of their adaptations for survival—an appetite for a varied diet,

making tools to gather food, caring for each other, and using fire for heat and

cooking—make up the foundation of our modern survival mechanisms and are

among the defining characteristics of our species.

Life was not easy for our ancestors. Without claws or canines, the earliest

hominins were physically more or less defenseless. Like other primates, they

could probably toss rocks, wave sticks, and create a big fuss when threatened.

They probably slept in trees

<http://humanorigins.si.edu/research/climate-research/survival-adaptable>

# Source E: Wolchover, Natalie. What Are the Limits of Human Survival? 9 August, 2012. *Livescience.com*

by Natalie Wolchover | August 09, 2012 03:21pm ET

One hears epic accounts of people surviving bullets to the brain, 10-story freefalls or months stranded at sea. But put a human anywhere in the known universe except for the thin shell of space that extends a couple of miles above or below sea level on Earth, and we perish within minutes. As strong and resilient as the human body seems in some situations, considered in the context of the cosmos as a whole, it's unnervingly fragile.

Many of the boundaries within which a typical human can survive have been fully established; the well-known ["rule of threes"](http://www.livescience.com/32320-how-long-can-a-person-survive-without-water.html) dictates how long we can forgo air, water and food (roughly three minutes, three days and three weeks, respectively). Other limits are more speculative, because people have seldom, if ever, tested them. For example, how long can you stay awake before you die? How high in altitude can you climb before suffocating? How much acceleration can your body withstand before it rips apart?

Experiments over the decades — some intentional, others accidental — have helped stake out the domain within which we, literally, live.

<http://www.livescience.com/34128-limits-human-survival.html>

Source F: Singer, Peter. The Singer Solution to World Poverty. *The New York Times.com*. September 5, 1999/

Yet the question of how much we ought to give is a matter to be decided in the real world -- and that, sadly, is a world in which we know that most people do not, and in the immediate future will not, give substantial amounts to overseas aid agencies. We know, too, that at least in the next year, the United States Government is not going to meet even the very modest Umited Nations-recommended target of 0.7 percent of gross national product; at the moment it lags far below that, at 0.09 percent, not even half of Japan's 0.22 percent or a tenth of Denmark's 0.97 percent. Thus, we know that the money we can give beyond that theoretical ''fair share'' is still going to save lives that would otherwise be lost. While the idea that no one need do more than his or her fair share is a powerful one, should it prevail if we know that others are not doing their fair share and that children will die preventable deaths unless we do more than our fair share? That would be taking fairness too far.

<http://www.nytimes.com/1999/09/05/magazine/the-singer-solution-to-world-poverty.html>

Source G: Dolan, Danger. “Human Survival Videos.” Youtube.com. June 19, 2014.

These are video clips of people who have survived unbelievably traumatic experiences.

<http://www.youtube.com/watch?v=XXkMintOyyk>

Source H: Fleming, Melissa. “Let’s Help Refugees Thrive, Not just Survive. “ Oct 2014. *Ted.com*.

50 million people in the world today have been forcefully displaced from their home — a level not seen since WWII. Right now, more than 3 million Syrian refugees are seeking shelter in neighboring countries. In Lebanon, half of these refugees are children; only 20% are in school. Melissa Fleming of the UN's refugee agency calls on all of us to make sure that refugee camps are healing places where people can develop the skills they’ll need to rebuild their hometowns.

<http://www.ted.com/talks/melissa_fleming_let_s_help_refugees_thrive_not_just_survive>

Source I: Stern, Jeffrey E. Hell in the Hot Zone. *Vanityfair.com*. October 2014.

As the Ebola epidemic rages, two questions have emerged: How did the deadly virus escape detection for three months? And why has a massive international effort failed to contain it? Traveling to Meliandou, a remote Guinean village and the likely home of Patient Zero, Jeffrey E. Stern tracks the virus’s path—and the psychological contagion that is still feeding the worst Ebola outbreak in history….

Ebola is one of the deadliest viruses known to medical science, with no specific cure and mortality rates of up to 90 percent. The Ebola epidemic now raging in West Africa is the worst one in history. It has decimated Meliandou and moved far beyond. But the mystery today is not how the epidemic began—it is why a concerted effort by an army of international experts was unable to stop it. Part of the answer is the chameleon-like character the virus displays in this part of the world. An even larger part lies in the international response itself. It was rapid and comprehensive—exactly what you would hope. But there was an unexpected reaction that undermined everything the experts sought to achieve—and at the same time fooled many of them into thinking they had succeeded in their aims. Eventually they understood the truth. By then it was too late.

**On the Move**

As near as anyone can tell, the outbreak started when a few tiny rod-shaped particles—each merely an attack plan coded in ribonucleic acid and wrapped in a protein shell—found their way from a fruit bat into the body of a child not yet two years old. Perhaps, while the mother was preparing the day’s hunt, some of the bat’s blood was flung in the child’s direction. Perhaps, while the mother’s attention was elsewhere, the child touched the animal, then brought his hand to his mouth, the way babies do. Either way, a few strands of the Ebola virus attached themselves to cells in the child’s immune system and used the cells’ machinery to replicate. The boy developed a fever, then diarrhea and vomiting. His organs began to fail. He began to bleed internally and went into septic shock. In four days, he was dead.

The way Ebola kills would seem impossible to mistake. What the casual observer knows of Ebola are its most spectacular cases, or the cinematic depictions of them: prodigious bleeding from eyes, ears, nose, anus, and nipples. Symptoms like these, presenting all at once, would be impossible to miss or misinterpret. But not every Ebola case ends with such a biblical scourge, and many of Ebola’s symptoms are identical to those brought on by other diseases. Until its final stages, Ebola can easily be mistaken for cholera. It can also look a lot like malaria, another long-tenured killer in Guinea. What no one has ever died of anywhere close to Guinea is Ebola. The last big Ebola outbreaks—in Uganda and the Democratic Republic of the Congo in 2012—were more than 2,000 miles away. They might as well have been in another world. If you’d told any of the investigators, as they considered the crisis developing in Meliandou, that they were looking at Ebola, they either would not have believed you or, just as likely, would have asked you what Ebola was.

<http://www.vanityfair.com/politics/2014/10/ebola-virus-epidemic-containment>

Source J: Cleland, Marie. “Eight Inspirational Stories of Human Survival.” 26 February 2009. *Matadornetwork.com*.

It’s a story so extraordinary it has spawned several books, a Hollywood film, an acclaimed documentary and an official website, and can be recognized with just one word: Alive.

When the plane carrying a Uruguayan rugby team crashed in the Andes in October 1972, the story should have ended there, but it was only just beginning. Of the 45 people on board, 12 died in the crash or shortly afterward, another five passed away the next morning from injuries, another on the eighth day, then eight in a later avalanche.

The remaining 16 struggled through extreme cold and starvation before resorting to cannibalism of those who had perished.

When it became clear help wouldn’t come to them, Nando Parrado and Roberto Canessa hiked for days out of the mountains and eventually found help. The most recent, and arguably the most sensitive retelling of the 72-day saga is Gonzalo ArijÃ³n’s 2007[documentary](http://www.amazon.com/gp/product/B001P9G3F6?ie=UTF8&tag=matado-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B001P9G3F6), *Stranded: I Have Come From a Plane That Crashed on the Mountains*.

<http://matadornetwork.com/bnt/eight-incredible-survival-stories/>

Source K: Center for Disease Control and Prevention. Preparedness 101: Zombie Apocalypse. Public Health Matters Blog May 16, 2011.

**Better Safe than Sorry**

So what do you need to do before zombies…or hurricanes or pandemics for example, actually happen? First of all, you should have an emergency kit in your house. This includes things like water, food, and other supplies to get you through the first couple of days before you can locate a zombie-free refugee camp (or in the event of a [natural disaster](http://emergency.cdc.gov/disasters/), it will buy you some time until you are able to make your way to an evacuation shelter or utility lines are restored). Below are a few items you should include in your kit, for a full list visit the [CDC Emergency page](http://emergency.cdc.gov/preparedness/kit/disasters/).

<http://blogs.cdc.gov/publichealthmatters/2011/05/preparedness-101-zombie-apocalypse/>

Source L: Dell’Amore, Christine. “World War Z: Could a Zombie Apocalypse Happen?” 25 June, 2013. *Nationalgeographic.com.*

As a science fiction writer, Slonczewski is used to imagining doomsday scenarios. Her 2010 novel [*Brain Plague*](http://www.amazon.com/Brain-Plague-Elysium-Cycle-Novel/dp/1604504463) featured zombie-like characters that bite people to transmit intelligent microbes, which then communicate with the infected person’s brain cells. So I asked her: Could a zombie-like virus occur in real life?

Sort of. No one’s expecting the dead to rise again, of course, but there are so-called neurotropic viruses that attack our [brains](http://science.nationalgeographic.com/science/health-and-human-body/human-body/brain-article/) and cause aggressive or bizarre behavior.

“I suppose you could imagine a [new neurotropic] virus that would cut off the higher brain function and then induce a starvation-like state and could thereby induce the disabled person to go after brains”—the classic zombie meal, Slonczewski said.

Some existing neurotropic viruses are already the stuff of nightmares. For instance, “rabies is pretty scary on its own,” said [Kartik Chandran](http://www.einstein.yu.edu/faculty/10768/kartik-chandran/), a microbiologist and immunologist at the Albert Einstein College in New York who studies the deadly [Ebola virus](http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/ebola/qa.htm). (In the movie and book, the zombie plague is first misidentified as rabies.)

Like the mythical zombie virus, rabies is transferred through biting. Once inside your body, the virus travels directly to your brain and “makes you go nuts and go and bite more people,” he said. More than 55,000 people, mostly in Africa and Asia, die from rabies every year, which is one person every ten minutes, according to the [World Rabies Day](http://www.worldrabiesday.org/EN/world_rabies_day_mission.html) website. Most infected people are bitten by rabid wildlife.

<http://voices.nationalgeographic.com/2013/06/25/world-war-z-could-a-zombie-virus-happen/>