

Natural Disasters, Doug Hayhoe, September 2021, revised March 2024

What causes natural disasters that occur independent of humans? Is there a purpose to them?

By the time you read this essay, you've probably moved on from the pandemic. Its memory is fading. No more masks, no more isolation, no more vaccines! On the other hand, if you lost a loved one during COVID-19, you'll never forget this pandemic. It will stay with you for life.

That's what happened to my father. Both of his parents died during the 1919 Spanish Flu pandemic, when they were still in their twenties. It was a traumatic time, losing both parents in childhood. He then spent six months in a sanatorium, as his lungs had marks of TB.

He came out of it better than most, however, as he was adopted by his aunt who had married Cecil Hayhoe. He grew up in a loving and supportive environment. But he never forgot losing his own parents at age 3.

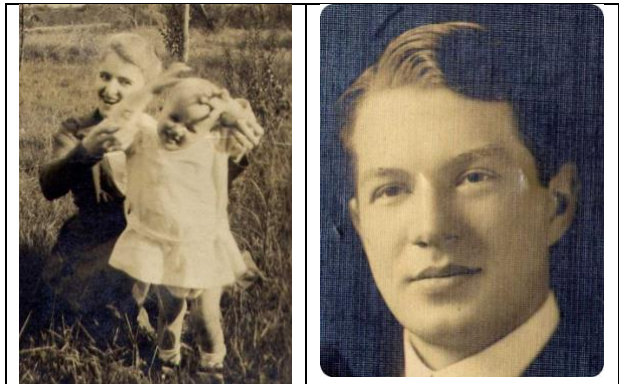


Figure 1 My father's parents. My father is the toddler on the left, with his mother.

Pandemics

The first worldwide pandemic, the bubonic plague, killed 25 million people in the 6th century. The second pandemic, again the bubonic plague but known as the Black Death, killed 50 million people in the 14th century, one third of everyone in Europe. It kept reappearing at different times, such as when Isaac Newton was formulating his discoveries in the 17th century. The Spanish Flu virus killed 50 million people just after the First World War, such as my grandparents. Smallpox killed 36 million people in the rest of 20th century. And the COVID-19 virus, similar to the Spanish Flu virus, has killed 7 million people so far, according to John Hopkins University.

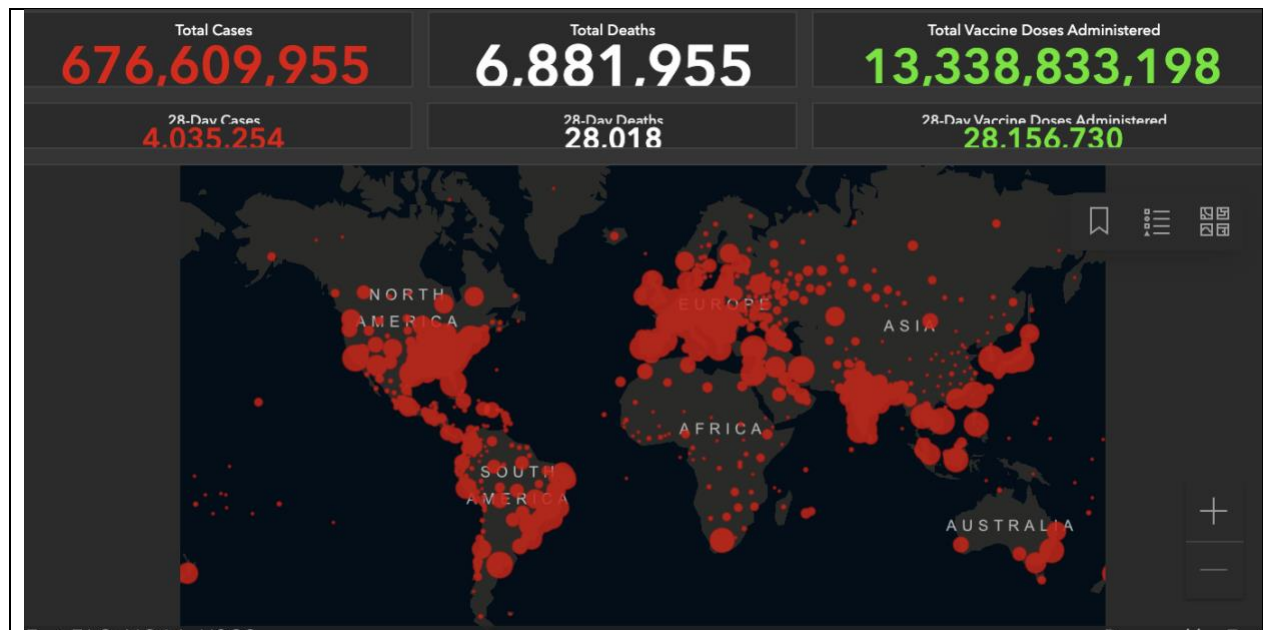


Figure 2 [COVID-19 Dashboard by the Center for Systems Science and Engineering at John Hopkins U.](#)

Types of natural disasters

In addition to plagues, there are physical disasters, such as earthquakes. Many millions of people have died from them over the centuries. Most of us remember the December 2004 Tsunami in the Indian Ocean that killed 230,000 people. It was caused by an earthquake under the ocean. (Here's a simulation of it: [2004 Indonesia Tsunami edit.gif](#).) Or the January 2010 earthquake that killed between 100,000 and 200,000 people in Haiti (Figure 3). The US geological survey seismologists predict that another 3 million people may die in the 21st century from earthquakes.



Figure 3 Damaged buildings in Port-au-Prince.
[Photo by Marco Dormino/The United Nations Development Programme.](#)

Then there are atmospheric disasters. While tornadoes, hurricanes, and floods are more localized, they have contributed to hundreds of thousands of deaths. The worst atmospheric disaster the world has ever experienced may still be in the future – the results of unchecked climate change (see my essay *The Science of Climate Change*). The devastating wild fires of the summer of 2023, like no other season in Canadian history, are just a small sample of what we may be in for.

What causes natural disasters?

[Robert S. White](#) is an evangelical scientist at Cambridge. In his article, “Unnatural disasters” ([Creation Care and the Gospel](#)), he points out that so-called natural disasters in the atmosphere and geosphere have been around for millions of years: “[They] are what makes the earth a fruitful, habitable place where humans and indeed the whole biosphere can live and thrive” (p. 194). If there had never been volcanoes on the earth, there would be no carbon dioxide in our atmosphere to warm the earth up. If there were no floods, the fertile soils necessary to feed a great part of the human population would not exist. If there were no tectonic plates, there would be no mountains that provide rich runoff water and minerals necessary for life.

White has an interesting perspective on disasters. Since the impact of most of them could be severely reduced if humans were doing everything they could to prepare us, we should really refer to them as “unnatural disasters.” He writes (p. 194),

“We are accustomed to calling such catastrophes ‘natural disasters’, as if humans played no part in them. Yet once you scratch beneath the surface it becomes clear that almost always it is the actions, or the inactions or neglect of humans which turn natural processes into disasters. To this extent the term ‘natural disasters’ is a misnomer and is actually highly misleading.”

In other words, if buildings were properly constructed, if earth and weather events were carefully monitored, and if warnings were given ahead of time, the death rate would be much lower.

Why does God allow natural disasters?

In the Old Testament, God sometimes sent natural disasters as punishment for a nation's sins. Examples of this are the destruction of Sodom and Gomorrah (Gen. 18:20; 19:25-26), and the ten plagues that fell on Egypt because Pharaoh refused to let Israel go (Ex. 8:1-2; 9:1-2; etc.). Moses also warned Israel that disasters would come on them if they disobeyed God (Deut. 31:17).

Sometimes, however, the cause for a natural disaster is not stated in the Bible. Or if it is stated, it is looked at as an opportunity for God's healing work to be shown. The famine in Egypt in Joseph's time was not attributed to God's judgment (Gen. 41-43). But God revealed it ahead of time to Joseph so that he could prepare Egypt to survive and help other nations around.



Figure 4 Watch an 11 min. video, [Book of Job Summary: A Complete Animated Overview.](#)

Another intriguing example is the case of Job (Figure 4). His book opens by saying, “This man [Job] was blameless and upright; he feared God and shunned evil” (Job 1:1). But, then, a series of natural disasters, one after another, destroys his wealth, his health, and even his children (Job 2). When his friends come to sympathize, they end up by just accusing him of hiding secret sins. Why else would God punish him so severely, they argue, if he wasn't wicked inside (see, for example, Job 21).

Job's friends, however, didn't have the advantage that we have in understanding the cause of the disasters that fell on Job. We're told what it is in the very first chapter. God allowed Satan to bring these disasters on Job, not as punishment, but to test the reality of his faith. In the end, God blessed Job with twice as much as he originally had (Job 42).

In John's Gospel, Jesus meets a man born blind, something his parents would consider a natural disaster. But when his disciples ask Jesus, “Rabbi, who sinned, this man or his parents, that he was born blind?” Jesus replied, “Neither this man nor his parents ... but this happened so that the work of God might be displayed in his life” (John 9:1-3). Jesus then completely healed the man.

On another occasion, when a tower Jerusalem fell, killing a lot of people, Jesus pointed out that they were not worse sinners than the rest (Luke 13:4). But he then added, “unless you repent, you too will perish!” In other words, everyone will face death one day because of their sins. But if they repent, it won't be their final death; for they will also possess eternal life (John 5:24-29).

The famine that spread across the Roman world in the New Testament days was not attributed to the sins of the people (Acts 11:27-30). But it was an opportunity for Paul to exhort the Christians living in Greece and Rome to help the impoverished believers in Jerusalem (Rom. 15:25-26). In doing this, he wrote two of the most beautiful, grace-filled chapters in the Bible (2 Cor. 8 and 9).

In summary, natural disasters can be God's voice alerting everyone to the brevity of life. But they can also be opportunities for God's work to be shown and for His people to help others in need.

What should we do when a natural disaster happens?

First, let's not be quick to blame it on an individual's or a nation's sins. But let's try to hear God's voice to all of us. Was the recent COVID pandemic a wake-up call to those of us who felt too secure in our modern age of technology and resources?

Second, let's use disasters as an opportunity for sacrificial giving. In many places, the Bible exhorts us to help all people in the time of a disaster (Gal. 1:10; 6:10a). Many Christian charities are doing just that. And they depend on our participation. We also have a special responsibility to aid those in the family of God (Gal. 6:10b; 1 John 3:17).

Third, let's support those studying and working hard in scientific fields, where they are mitigating the effect of natural disasters. Let's encourage more Christians, whom God has gifted for this kind of work, to do it for the benefit of humans and the glory of God.

Fourth, let's use personal and natural disasters as an opportunity to demonstrate the work of God in our own lives. May this result in our spiritual growth as we struggle with new circumstances and limitations. When the apostle Paul pleaded with the Lord to remove his "thorn in the flesh" (His poor eyesight? A speech impediment?), what was the answer? The Lord responded to Paul, "My grace is sufficient for you, for my power is made perfect in weakness" (2 Cor. 12:9).