



# The Horizon Newsletter

## June 2020

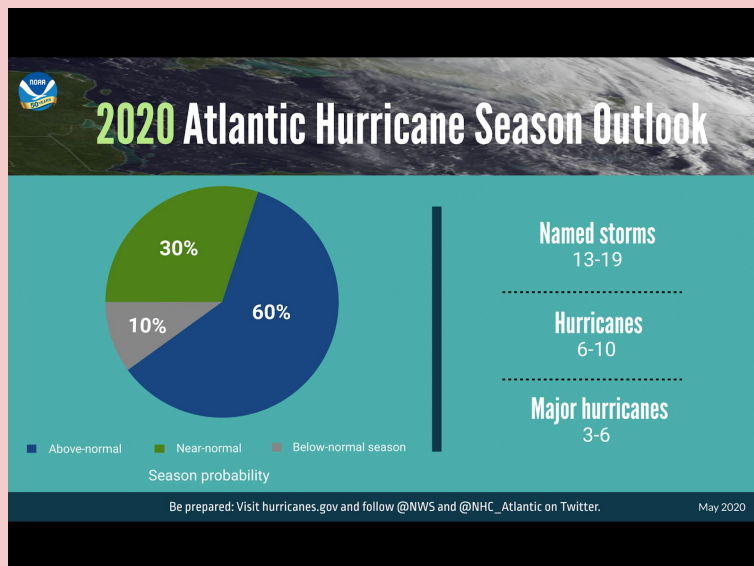
**How Humans are Controlling The Weather for the Worse.**

*By: Arya Bharti*

Who says humans can't dictate how global weather phenomenon behave, in fact we've been doing it for decades. Ever since the industrial revolution, humans have been pumping millions if not billions of metric tons of carbon dioxide into the atmosphere. CO<sub>2</sub> or Carbon Dioxide is a greenhouse gas, which means it helps trap heat in the earth's atmosphere. It is essential for all life on earth but too much of anything can be fatal. Since around 1760, humans started to have a warmer influence in overall temperature of the globe as a result of factories burning more coal and fossil fuels than ever before.

In the past century alone, temperatures around the world have climbed by 0.7 degrees Celsius, roughly ten times faster than the average rate of ice-age-recovery warming. As the atmosphere warms, so do the world's oceans, fueling storms like hurricanes. Hurricanes depend on warm water to form and refuel, which explains why we are starting to see more and more powerful storms each year. The 2020 Atlantic Hurricane season is expected

to be an above average hurricane season with an estimated minimum of at least 6 hurricanes in the region. Human activities such as burning fossil fuels and creating thousands of large scale agricultural farms are directly leading to climate change and causing storms to get even stronger every year. This also has an economic cost as hurricanes and tropical storms the past decade have caused over \$470.50 billion USDA dollars in damages.



## Solitary Confinement: The Dangers of Dealing with Yourself for Too Long.

By: *Abhiram Dasari*

Solitary confinement: we've all heard of it. And maybe for some, it doesn't seem so bad. After all, one has to deal with oneself almost constantly, what's the big deal? However, most of us know that solitary confinement is used as a very effective form of punishment. Well, as it turns out, what was once an effective way to punish people is now a form of psychological torture upon those who are confined, and all this came about with just one change.

Solitary confinement used to be a very short-punishment. Inmates in most prisons would be thrown into solitary confinement, or "the hole" for merely a couple of days, and in very rare cases, weeks, depending on the necessity. This was a very effective punishment. Behavior changed almost

immediately, and most didn't need a second session. However, the reason for this newfound behavior change is the exact reason why solitary confinement changed into such a trauma-inducing nightmare.

Humans, by nature, are very social creatures. This means that we spend most of our time interacting with other humans. This, as it turns out, is a process that is the very core of our mental health. When this is taken away for short periods, it is already enough to change our behavior entirely. However, when subjected to this for years at a time, this can leave lasting damage on anybody, no matter how mentally strong. Pair this with the lower cost maintaining a "supermax" facility versus a regular prison, and it is obvious why it is considered by many to be a great option.



However, too much of anything can turn disastrous, and such is the case with solitary confinement. In the past 20 years, solitary confinement sentence times have skyrocketed. Over the last two decades, prisoners have gone from having to spend a day or two in confinement, to years, and in some cases, life. Spending this long locked up in a cell for 23 hours a day can be very degrading to a person's mental health, and this poses a big problem. For example, studies have shown that many isolated prisoners "suffer from mental health problems including anxiety, panic, insomnia, paranoia, aggression and depression." The sheer profundity of these problems don't sink in until you consider how often solitary confinement is being used. The use rate of solitary confinement has been spiking constantly since the turn of the century, and despite this, it isn't shown to decrease overall violence, just violence when people are watching.

In conclusion, solitary confinement used to be a very effective form of punishment. However, due to overuse and over-sentencing, it has turned into a form of legal torture to take care of “problem prisoners” for wardens of the prison. Supermax facilities have been on the rise, and with them, mental illness in prisoners, and as awareness around this issue increases, we must all ask ourselves if we want to subject other humans to the same torture that we wouldn’t be able to bear.

### **Diarrhea: Common Illness; Global Killer.**

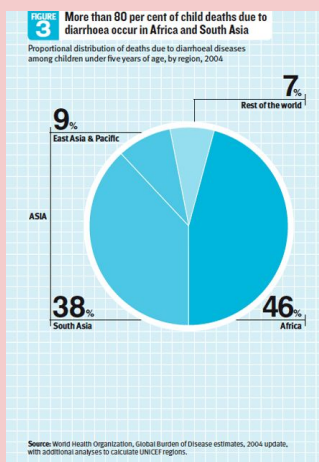
*Sruthi Anne*

In 2016, diarrhea was the 8th leading cause of death in all ages. It is responsible for over 1.6 million deaths worldwide. “Poverty alone does not lead to malnutrition, but it seriously affects the availability of adequate amounts of nutritious food for the most vulnerable populations. Over 90 percent of malnourished people live in developing countries.” For example, Northern Africa and South Asia accounts for over half the cases of childhood diarrhea. So, what actually is diarrhea? Diarrhea is a condition in which feces are discharged from the bowels frequently and in a liquid form. Some symptoms that occur are loose watery stools, abdominal cramps, abdominal pain, fever, blood in the stool, mucus in the stool, bloating, and nausea. There are many ways this disease can spread, but these 4 ways are most common: Infection, malnutrition, water source, and horizontal transmission (direct contact). Access to safe drinking water, use of improved sanitation and good personal/food hygiene are many ways diarrhea-related illnesses can be prevented. If someone gets infected with diarrhea, in most cases, it can be treated at home and can be solved by itself in a few days. Drinking plenty of fluid, staying hydrated and following the ‘BRAT’ diet (bananas, rice, applesauce, toast) can help ease symptoms. If it is a serious issue, a doctor might recommend a stool test, blood test or colonoscopy. Everyone needs to keep clean to kill germs and avoid getting sick. For example, compared to the U.S., mortality rates in India are much higher associated with diarrhea-related illnesses. About 88% of the diarrhea-related deaths are

attributable to unsafe water, inadequate sanitation, and insufficient hygiene. Despite these sobering statistics, strides made over the last 20 years have shown that diarrhea prevention focused on safe water and improved hygiene and sanitation is not only possible, but cost effective. In conclusion, diarrhea may not seem as such a big problem for us, but in other countries around the world, cases and mortality rates are increasing everyday. We need to inform people on how being sanitary and having good hygiene habits can prevent diarrhea. Governments and healthcare providers need to provide vaccines, treatment, and invest in safe drinking water to prevent the spread of disease.

References:

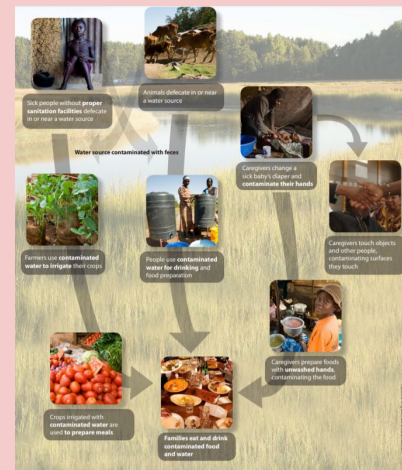
- [Diarrhea: Common Illness, Global Killer](#)
- [Diarrhea - Symptoms and causes](#)
- [Diarrhoeal disease](#)



**FIGURE 4** Nearly three quarters of child deaths due to diarrhoea occur in just 15 countries

RANK	COUNTRY	TOTAL NUMBER OF ANNUAL CHILD DEATHS DUE TO DIARRHOEA
1	India	386,600
2	Nigeria	151,700
3	Democratic Republic of the Congo	89,900
4	Afghanistan	82,100
5	Ethiopia	73,700
6	Pakistan	53,300
7	Bangladesh	50,800
8	China	40,000
9	Uganda	29,300
10	Kenya	27,400
11	Niger	26,400
12	Burkina Faso	24,300
13	United Republic of Tanzania	23,900
14	Mali	20,900
15	Angola	19,700

Source: World Health Organization, Global Burden of Disease estimates, 2004 update. The totals were calculated by applying the WHO cause of death estimates to the most recent estimates for the total number of under-five deaths (2007).



Apple's Accomplishments.

By: Sumant Anantha

If you ask someone what their top 5 popular companies are, they would say Apple for sure. What has Apple done to be favored by customers? What did Apple achieve throughout its company history? Apple was co-founded by Steve Jobs, Steve Wozniak, and Ronald Wayne on April 1st, 1976. Apple started as a computer company selling motherboards and computer



hardware. Apple starts to productively increase in staff and make a production line. Steve jobs started to make ideas to not only make computers but also Phones and mp3s. Thus on October 23, 2001, The world's first iPod was released. The customers were fascinated and thrilled by this device as it could download songs and connect to the Internet. But that was not the most surprising

product. In 2007, June 29th, Apple released an iPhone. A phone where you could text, call, take pictures, and use other applications. Those who did not feel impressed by the iPod definitely felt shocked and excited about the iPhone. Apple didn't just stop there, they thought creatively and made the iPad. An iPad is a tablet computer without a keyboard. If there is one thing customers like about Apple it would be improvements. Apple always makes improvements to its products as told. Throughout the years Apple makes direct improvements most Customers like. For example, iPhones increased in size and accuracy. The current iPhones we have today are special compared to the iPhones created 12 years ago. From one camera to three cameras, from a small screen with a home button to a large screen with no home button, and from an earphone plugin to no plugin with speakers implying that Apple upgraded basic features on their iPhones. Apple even has the courtesy to improve accessories like earphones into wireless airpods or adding lightning connectors used to charge phones onto earphones. Apple also kept track of its Computer systems even making a security system full of Apple ids and Macbooks(apple laptops that can connect to your Apple id). Apple is able to maintain it's products along with stock carefully. The company has been proven to be an excellent stock, increasing more than 700% over the past decade, and showing constant growth. With solid financials and a constant user base, the company is in exceptional appearance to be able to do strongly even in the middle of more challenging financial circumstances. According to



Apple iPhone



Apple iPhone 11 Pro Max

Motley fool, there are 3 reasons Apple is a great buy in the Stock Market: Apple is not overvalued, It has strong Fundamentals, and Cut-like following (groups of fans dedicated to a work of culture) makes the company succeed. With proper work results like Apple, Customers seem to treasure this Company for all its work in releasing and improving their products. Apple is shown to be unique against competitors like Samsung, Dell, Google, and Microsoft. These Competitors make android products that people also like to use but Apple is the only company to make Creative products with special features and programs customers seem to like. Thus the company will be in a Person's top 5 most popular companies.

## **How the Civil Rights Movement Changed Immigration to the United States**

*By: Amuktha Dasari*

Immigration has always been a hotly debated topic in our country's history. Laws and restrictions on who is permitted entry to the United States go in and out of effect, but the US has always been a destination that represents a fresh start; a land of opportunity and liberty, and a safe haven for people of war-torn countries all over the world. However, this opportunity was not always afforded to everyone. Historically, immigration to the United States has been restricted to countries with majority white populations. In fact, in 1924, Congress passed the National Origins Act, with the explicit purpose of "preserving the ideal of American [Northwestern European] homogeneity". This meant that non-white immigrants were not allowed citizenship, a demographic that included immigrants from Asia, a large part of Europe, and Africa.

These kinds of racially motivated discriminatory policies were in effect well into the 1960s and were even condemned in the greater international community. Within America, however, racism was still a widespread pandemic. In the aftermath of the Supreme Court's ruling on *Brown v Board of Education*, requiring all public schools in the United States to be racially integrated, the nation was in uproar. All-white private academies were opened, the rate of racially motivated hate crimes rose, and conflict over civil

rights began. Activists like Martin Luther King Jr. and Rosa Parks encouraged peaceful protest for civil rights for black people. The pressure put on the Kennedy and Johnson administrations led to the passing of a slew of civil rights policies.

While not a stated part of the legislative platform of the movement, one of the laws passed was the Immigration and Nationality Act of 1965, otherwise known as the Hart-Celler Act. The Hart-Celler Act got rid of restrictive quotas on the demographics of immigrants allowed into the country and permitted family-based immigration. The act also opened up immigration to all Asian countries, which had previously been completely barred from immigration to the United States. Most non-white citizens of this generation whose families immigrated to the United States after 1965 can trace their citizenship to the Hart-Celler Act, and thus to the revolution that was the Civil Rights Movement.

### **SpaceX : Why is everyone about it?**

*By: Harvik Kolla*

On 30 May, tens of millions of enthusiasts were glued to their screens as SpaceX's Dragon capsule soared into the air aboard a Falcon 9 rocket. The following day, as the capsule landed at the International Space Station, Robert Behnken and Douglas Hurley made history as the first astronauts to ride a craft into orbit.

"Why is this so important? We have been to space many times?" you may ask. This development, almost a decade in the planning, is undoubtedly an achievement for NASA, and for Space X and its reusable rockets.

The weekend's launch also makes the position of SpaceX. More recently, other companies have flown humans to space. But SpaceX has succeeded at the goal of carrying people all the way into orbit. The company has achieved this through a team of engineers and designers, and the determination of its founder, Elon Musk. Arguably, SpaceX's most important innovation has been to engineer the Falcon rocket so that it can be reused after launch. Once it has released its payload, the Falcon returns to Earth and lands which other rockets do not do.





SpaceX will make its next run to the ISS as early as August. Musk should use this next mission to show that space exploration and research are global: This is something that will inspire the millions around the world who watched the weekend's launch with surprise, and will motivate them to further develop and improve. Keep an eye out for more interesting technological advancements throughout this upcoming year!

## **China's Suspicious Activities**

*By: Aaryan Kumar*

While the world has been dealing with Coronavirus, China has been very busy. China has always been known for suspicious activities and the Modern Era has seen no different. Many big issues have been raised against China in the past, but none have been documented more than the issues of the modern world.

One issue has been the prosecution of the Muslim Uighurs, and the way that the modern world sees this. Because of historical prosecution and the dominance of the Eastern Han Chinese, the Uighurs staged riots across the region. This was labelled as a extremist terrorist action(to be fair Chinese

Han were killed). The military was ordered into Xinyang, Western China, to put down the “insurrection” and restore order. Once this was done the Chinese made camps within the walls and ordered that Uighurs were to be “re-educated” within these camps. This has been met with condemnation from the Western world but not much has come of it. Despite Western objections, China has chosen to ignore said complaints and to continue with its actions. This has gained even more importance through the Chinese hope of reviving the Silk Road Initiative which foresees trade passing through the Xinyang region of China. This results in China ordering higher restrictions and complete control over the area.

Another issue was the militarization of the South China Sea, featuring straight up defiance of UN Law. Historically, claiming national waters was a very simple matter: Anything 200 nautical miles off your country were your waters and whatever was in there belong to you. The South China Sea, however, is in a state of crisis over the ownership of the resources within the sea. Many countries cases are normal and can be cleared through diplomacy although China’s claims are ridiculous. China claims to have ownership of a full 90% of the South China sea and has used its military to enforce its claim. It uses its powerful navy, second only to the US, into bullying the other nations to submit to the Chinese claim through a show of force. China has also constructed advanced artificial military bases to supply its navy for long-term deployment through the South China Sea. Despite UN law siding with other nations, China chooses to ignore the claims and to press on with its expansion

### **Arctic Circle Oil Spill**

*By: Shrihan Dadi*

Permafrost, frozen ground, melted, causing a fuel tank to collapse in the Arctic Circle. The softening of the permafrost caused the supporting posts of the fuel tank to sink. The tank held 21,000 tons of oil. As a result of

this, there was a 135 mile oil spill. More oil spilled into water than land. Subsequently, a lot of Russia's important rivers (and their respective tributaries) filled with these oil products. The spill occurred at a power plant operated by Norilsk-Taimyr Energy Company. Since the situation was so drastic, Russia had to declare a state of emergency. Norilsk could have to pay more than 85 million US dollars because of the damages done to the water bodies by the oil. Rivers and tributaries turned bright red (the diesel oil was dyed red).

Norilsk tried to contain the spill, but the spread was rapid. A Russian liquidation team is hard at work trying to pump out oil from the water bodies and clear the surrounding soil. A criminal case has been opened because instead of alerting the government in a timely manner, Norilsk chose to focus on containing the spill first. Many business owners lost a lot of money because of this emergency. This oil spill just goes to show the drastic effects of global warming. Structures destabilize because ice melts, causing them to break apart.

