

Surf City XIX

Huntington Beach High School

1st DISEC

Topic A: *Maritime Piracy*

Topic B: *Biological Warfare*



Welcome Letter

Dear Delegates,

On behalf of the Huntington Beach High School Model United Nations Program, we would like to welcome you to our Surf City XIX advanced conference!

Our annual Surf City conference upholds the principles and intended purpose of the United Nations. Delegates can expect to partake in a professional, well-run debate that simulates the very issues that those at the United Nations discuss every day. Both novel and traditional ideas will be shared, challenged, and improved.

It is our hope that all delegates will receive the opportunity to enhance their research, public speaking, and communication skills as they explore the intricacies of global concerns through various perspectives, some of which may be very different from their own. We hope their experiences here give them new insight and values that they can apply outside of the realm of Model UN for the betterment of the world community.

Please do not hesitate to approach our Secretariat or Staff Members with any questions or concerns that you may have throughout the day. We wish the best to all our participants and hope that they may share a fulfilling experience with us!

Enjoy the conference!

Sincerely,



Zach Bernstein
Secretary General



Vivian Bui
Secretary General



Lauren Le
Secretary General



Alison Miu-Martinez
Secretary General

Meet The Dais

Rachel Wood

Hi guys! My name is Rachel and I am so excited to meet you all at Surf City XIX! I am a senior at HBHS and am currently in my fourth year of MUN. Participating in this amazing program has allowed me to expand my perspective on the world around me. Additionally it has helped me to become a confident public speaker. Apart from MUN, I swim on the varsity team here at HBHS and am a member of a few clubs, such as the National Honors Society and the Rotary Club. When I am not on campus, I usually spend a lot of time at the beach and recently finished my second summer as a Huntington Beach City Lifeguard. Good luck and see you all on February 4th!

Ryan Flory

Hi, my name is Ryan Flory and I will be one of your co-chairs for Surf City XIX! Through the HBHSMUN program, I have made several friendships and have learned practically every good hook using a quote from *The Office*. Outside of MUN, I am the Vice-President of the National Honor Society, the Co-President of Link Crew, and the Editor-in-Chief for our journalism program here on campus. With this, I also compete for both the varsity water polo and the varsity swim team. When I am not in the pool or writing my next article, you are guaranteed to find me at the beach. As a Huntington Beach State Lifeguard, I love to body surf, swim buoys, paddle oil rigs, and compete in any lifeguard national events that I can. I am so excited for the committee and I can not wait to see you guys in the debate!

Bella Sanchez

Hi my name is Bella Sanchez and I will be one of your co-chairs for Surf City XIX. I have been in the MUN program at HBHS for three years now and I enjoy getting to participate in the more-debate-centered parts of the program. This is by far one of the most fun, challenging, and beneficial programs I have ever been a part of and I am so excited to chair. A fun fact about me is that I have been dancing for 11 years. I dance for the school in the APA program, and I am also a part of the competitive company of my studio outside of school. Currently, we are prepping for our annual Christmas show, The Grinch! When I am not at my studio, I am hanging out with my family and friends, or at the beach. Overall, the chairs and I are looking forward to a fun conference!

All Papers are due on **JANUARY 30, 2022** by 11:59pm to
surfcity.1disec@gmail.com

Topic A: Maritime Piracy

Background

Maritime piracy is the plundering, hijacking, or imprisonment of a vessel within international waters.¹ While the international community has attempted to counter the persistent embezzlement and misconduct that occurs overseas, maritime piracy remains an enduring crime as a result of its history and modern influences. The idea of maritime piracy can be traced back to the 14th century, in which the Sea Peoples sailed the Mediterranean and Aegean Seas.² The Sea Peoples were soldiers in Central Europe who turned to maritime piracy in order to reach financial stability. Here, they raided cities from England and Spain to the Black Sea and Persia, using the narrow channels as a geographical advantage.³ The Sea Peoples sparked generations of maritime piracy attacks and created framework for raiding coastal areas that relied on using geographical locations to funnel their victims. Many of the channels that were commonly used by early pirates include Gibraltar, Madagascar, and the English Channel.⁴ Piracy continued to occur after the 14th century within the international community, commonly in regions such as Europe, Southeast Asia, East Asia, the Persian Gulf, Madagascar, the Caribbean, Canary Islands, and North America.⁵

Oftentimes these pirate attacks occurred in hopes of compensation or a form of monetary reward. Many pirates used the process of plundering or looting in order to receive jewels, medicines, and ship's equipment to increase their financial status. This can specifically be seen within cases such as the Caribbean.⁶ Here, the country suffered economic insufficiency as the Navigation Acts restricted their trading capabilities with foreign vessels, pushing for many to have to live below their means. Individuals then had to turn to maritime piracy in order to provide for themselves through luxury goods such as silk and calico. The ideology of increasing one's financial status through maritime piracy was less common in the means of gold as it lacked significance simply because of its limited value within their society.⁷ Pirates often viewed merchant ships as a more exclusive option, rather than Spanish Galleons that were loaded with gold and stones.⁸

Today, the ideals surrounding early maritime piracy are still very prominent against seaborne vessels. With the increase of international trade as well as technological advancements, maritime piracy has had several drastic impacts on the international community. To start, the location of the attacks has changed from geological advantages such as canals to simply where a majority of commercial vessels can be found. It is common for modern-day maritime piracy attacks to occur within the Gulf of Aden, the Somali Coast, the Strait of Malacca, the Strait of Singapore, and the Gulf of Guinea, simply because of the increased dependability of trade ships. Within these regions, maritime piracy attacks occur for different reasons such as terrorism and trafficking, yet all have the central goal of improving one's financial status.

Poverty has effectively made maritime piracy the only option for many vulnerable seafarers and fishermen. Pirates are paid a commission for every ship they plunder, allowing individuals to make around 30,000 to 75,000 US dollars for each ship.⁹ To put this into perspective, by plundering and holding one ship for ransom, pirates can make equivalent to the average income an American citizen makes within a year. Pirate kingpins who are higher on the illicit trade hierarchy have the opportunity to receive larger cuts of the profit, taking 30 to 70 percent of the profit every time a hostage is returned.¹⁰ In total, from 2005 to 2012, the ransom profits from maritime piracy were over 400 million US dollars.¹¹ Thus, pushing for many

unemployed and desperate citizens to turn to piracy to easily reach financial stability. With this, poverty has also motivated individuals to commit petro-piracy. Groups such as the Niger Delta Avengers, the Niger Delta Greenland Justice Mandate, and the Bakassi Strike Force, seek to achieve economic stability through illegally taking oil after the vessel is hijacked.¹² This process serves as a way for pirates to fight back against the control of resources within the region, taking the stolen oil back to illicit refineries in order to make a profit. Petro-pirates off the Somali coast can make up to 106 US dollars for each barrel of oil they obtain.

With this, the waters that link the Red Sea and the Indian Ocean, known as the Gulf of Aden, has become an increasingly popular hotspot for maritime piracy attacks in the late 2000s. This is simply because of the city of Aswan, which is one of the most direct trade routes of northwest Africa by Arab settlers. With the increased number of trade ships within the region, it continues to remain influential and attract several pirates, hoping to achieve financial stability.¹³ As of 2008, the pirates that did enter the Gulf of Aden made roughly over 120 million US dollars.¹⁴ Although this does not directly impact the overall success of the country, bigger corporations that lay within the shipping industry had to pay over 900 million US dollars in return for the losses.¹⁵ Similarly, in the Gulf of Guinea, the increase of maritime piracy within these waters has led to the compulsion for offshore oil and gas companies to employ private maritime security companies, or PMSCs, to protect the transportation of their vessels.¹⁶ These PMSCs often work within the commercial shipping industry in waterways that are hotspots for piracy, providing military or security services. Ultimately, as an international community, our economy and the capability of our trade agreements are decreasing simply because of the increase of maritime piracy and abuse of power overseas.¹⁷

Technological advancements and improvements have helped to bring ideas surrounding security complexity on an international scale to a forefront. Mass weaponry such as machine guns, shotguns, pistols, and even rocket-propelled grenades or RPGs, have become more advanced and difficult to control.¹⁸ These forms of weaponry are continuing to be used in modern maritime piracy, pushing unawareness and a lack of security overseas. Similarly, technology such as the use of mobile phones, satellite phones, sonar systems, and global positioning systems (GPS), have also contributed to this idea.¹⁹ For example, there were approximately 162 pirate attacks on large vessels within 2019, and in 2020 this number drastically increased to about 195, because of these advancements.²⁰ As such, modern pirates can take advantage of these technological opportunities to overthrow large cargo ships in poorer areas. Most of which occur when the pirate crews are found on smaller vessels, as well.

Prosecution surrounding these pirates tends to be avoided or simply forgotten about within the international community. Due to several countries' lack of a centralized government, cases often fall short, even if they are criminalized for their efforts.²¹ For example, within regions such as the Gulf of Guinea and the Somali Coast, they do not have a proper form of government or jurisdiction, thus many of the maritime areas and boundaries are not regulated. This pushes for a loss of approximately 13 to 16 billion US dollars within the international community, simply because of the lack of investigation, regulation, and or reports surrounding these crimes.²² Yet, this is not to say that the international community has not been working to protect against modern maritime piracy. Several non-governmental organizations such as the International Chamber of Commerce (ICC) and INTERPOL have been striving to directly combat the issue. For the ICC, they established the International Maritime Bureau (IMB), which maintains statistics regarding maritime piracy attacks.²³ These records date back to 1995, spreading awareness by indicating the immense amount of dominance these pirate crews obtain against vessels overseas.²⁴ INTERPOL increases law enforcement capabilities against these crimes²⁵.

United Nations Involvement

The United Nations has made several attempts to counter the embezzlement and misconduct that occurs overseas through modern maritime piracy. In 1958, the issue was originally tabled at the Geneva Convention on the High Seas.²⁶ Here, they created the first international treaty that solidified the rules regarding the national law relating to the high seas or international waters. In doing so, this Convention also set a precedent for the creation of the United Nations Convention on the Law of the Sea or UNCLOS.²⁷ The UNCLOS was established by 617 countries in June, 2016 and set up a legal framework for all marine and maritime activities. To this day, UNCLOS remains one of the most influential conventions established by the United Nations as it is directly working to eliminate maritime piracy. With this in mind, UNCLOS also created Articles 101 to 107, that established a direct definition as to what maritime piracy is and the different forms that it can take within our modern era. Along with this, UNCLOS also influenced the creation of the Uniformity in Maritime Piracy law.²⁸ This law argued that with the ranging definitions as to what maritime piracy is, a uniform definition needs to be regulated to strengthen legal documents regarding anti-maritime piracy laws. From here, the United Nations Security Council has also made several drastic changes in order to help combat the issue. Security Council Resolution 1816, 2008, directly provided an opportunity to combat Somali maritime piracy.²⁹ The resolution condemned all acts of piracy within the region and authorized enforcement to take place to overturn these crimes that have been so detrimental. The resolution also urged member states who operated within these Somali areas, whether that be naval or aircraft, to take precautionary measures and to be aware of the possibilities of armed robberies through maritime piracy.

After the passage of Security Council Resolution 1816, the United Nations also worked to create The Contact Group on Piracy off the Coast of Somalia or the CGPCS.³⁰ The CGPCS is a voluntary AdHoc forum that works to bring together outside organizations, countries, and individuals, to combat the excessive use of maritime piracy within Somalia. The United Nations continued by also passing Security Council Resolution 2316, which renewed another year of this authorization of naval collaboration in Somalia while also taking into consideration that the threat of maritime piracy had significantly decreased due to their impact.³¹ With this, the United Nations also created other groups such as The Division for Ocean Affairs and the Law of the Sea (DOALOS) and UNODC Global Maritime Crime Programme.³² Both of these organizations worked cohesively to prevent and prosecute those who commit maritime piracy, by providing information, advice, and assistance, to states so they can better understand how UNCLOS operates.³³ The creation of these organizations also provides comprehensive criminal justice support to many countries within the international community. Some of which including, the Gulf of Aden and the East African Region consisting of Comoros, Djibouti, Kenya, Madagascar, Mauritius, Tanzania, and Somalia. Similarly, the United Nations created the International Maritime Organization, IMO, in order to enforce the safety and security of international trade. The IMO also continues to create guidelines and standards pertaining to shipping in order to protect the international community from an increase of pollution.³⁴ Along with the United Nations, the European Union has also worked within the international community to establish the European Union Naval Force Operation, or the EU NAVFOR.³⁴ This operation is directly focused on countering piracy through direct military involvement within the waters off of the Western Indian Ocean and the Horn of Africa. Thus, it pushes for the overall decline in the increase of Somali piracy.

Case Study: The Gulf of Guinea

Maritime piracy has played a drastic role within the international community, especially with the increase of international trade and technological advancements. The Gulf of Guinea has gained recognition as one of the most dangerous regions for maritime piracy, due to its increasingly large offshore oil and gas companies, corruption, and unreported fishing programs. The Gulf of Guinea spans from Angola to Senegal and is one of the most influential trade routes within the international community.³⁵ There are over 1,500 cargo ships, fishing vessels, and tankers navigating the ever-changing waters on the daily, waiting to transport cargo from Central to Southern Africa.³⁶ The consistent cargo traffic is a catalyst for the competitive embezzlement and looting systems associated with maritime piracy.

The increasingly large offshore oil and gas production companies are mainly out of Nigeria's Niger Delta, which is sitting directly on the Gulf of Guinea and the Atlantic Ocean. Nigeria produces and distributes the entirety of the oil and gas in Africa. Nigeria was distinguished as the eleventh largest oil producer worldwide highlighting its heavy involvement with oil distribution in the international community.³⁷ Today, there are over 18 operating pipelines that produce an average of 1.8 million barrels of oil per day, accounting for 90 percent of their export value.³⁸ As oil companies expanded in this region, trade increased drastically. The Gulf of Guinea is riddled with weak government enforcement and limited security, individuals have been able to easily steal oil from cargo-carrying vessels. As oil exports have increased over time, maritime piracy in the region increased proportionally. However, this form of maritime piracy began to evolve in 2014 when pirates started to capture seafarers, holding them for ransom until the pirates could make an increased profit. The International Maritime Bureau (IMB) tracked the expansion of ransoms and kidnappings within the region and reported the Gulf of Guinea accounts for 95 percent of kidnappings that occur overseas.³⁹ This idea has been directly seen in cases reported to the IMB, in which 130 crew members were kidnapped by maritime pirates on 22 different occasions.⁴⁰ The lack of security within these regions is primarily caused by limited centralized governments forcing bigger offshore oil and gas companies to pay for the protection of their vessels.

Corruption within the Gulf of Guinea is one of the most pertinent underlying roots of maritime piracy. From the skyrocketing unemployment rates in West Africa to the corrupt extrication practices regarding Nigeria's oil, the region is in a constant state of unrest. The weak legal systems and limited law enforcement have emphasized a lack of development and protection against piracy within the Gulf of Guinea.⁴¹ This corruption is a direct representation of a threat within democracy at the expense of its citizens. There are several different reasons as to why corruption is prevalent within each of the individual states. For example, Nigeria's naval forces have been accused of creating deals and maintaining relationships directly with pirates.⁴² In doing so, they took advantage of the system, transporting oil and illegally making a profit. On average, the country of Nigeria loses 1.5 billion US dollars due to maritime piracy theft, a majority of which is occurring due to corruption and the misuse of power in the region.⁴³ This connection between corruption and piracy has only increased, as government officials strive to gain more insight into the economic situation at hand.

The short-term relationships that political figures have created with pirates have only led to the decline of these coastal states and the lack of legal positions. With this, the government corruption and elitist mentality have caused countries in the Gulf of Guinea to lose billions of dollars in resources. With the increase of government corruption and the continued demand for oil, maritime piracy will continue to be prevalent within the region.

Along with government corruption and the offshore oil companies representing a major root cause of maritime piracy, unreported fishing programs are also extremely influential in regards to the overall success of maritime piracy within the region.⁴⁴ Illegal, Unreported, and Unregulated (IUU) fishing is one of the greatest threats to marine ecosystems as undocumented vessels capture fish.⁴⁵ IUU fishing is often related to organized crime and is particularly popular within developing countries that do not have the resources or capability to monitor their waters. Due to the increase of government corruption and a lack of security, it is difficult for any organization to control the Gulf of Guinea. Not only is this process extremely dangerous, but it also pushes many local fishermen to fall subject to turning to maritime piracy. Here, these piracy crews can take advantage of smaller fishing corporations and continue to exploit local fishermen.

To mitigate the effects of maritime piracy, the states surrounding the Gulf of Guinea and the international community have implemented several security measures. The region has worked to create institutional mandates to address maritime piracy and achieve a level of stability.⁴⁶ The Economic Community of West African States (ECOWAS) and the Economic Community of Central African States (ECCAS) have both strived to create regional collaboration to protect against maritime piracy attacks.⁴⁷ Along with this, they have also introduced the Gulf of Guinea Commission, GGC, which created conditions of confidence and peace among the states in the Gulf of Guinea.⁴⁸ They have also instituted several initiatives such as Operation Prosperity, Maritime Trade Information Sharing Centre, and the Deep Blue Project.⁴⁹ These initiatives cohesively work to ensure a secure maritime environment while providing strategies that aim to prevent illicit activities that transpire in the Gulf of Guinea. For example, the Deep Blue project alone creates a network of assets to monitor and protect the region at all times through the use of two special mission vessels, two long-range aircrafts, 17 fast response vessels, three helicopters, and four airborne drones. With the use of these organizations, the number of hijackings and missing seafarers has continued to decrease. In 2015, 1,921 seafarers were affected by piracy; whereas, in 2016, only 1,762 were impacted. This change is minimal, however, there must be continued efforts from both the international and regional communities in order to eliminate maritime piracy in the Gulf of Guinea.⁵⁰

Questions to Consider

1. What current measures have been set in place regarding the protection of trade within your nation, and how have they been successful in eliminating the misuse of maritime piracy overseas?
2. Has your nation put in place specific laws and border regulations in order to directly regulate maritime piracy? If so, how does your nation hold those who commit maritime piracy accountable for their actions?
3. How have technological advancements fluctuated the usage of maritime piracy within your region? What changes can you make to counter this and/or continue to enforce these new technologies?
4. Maritime piracy is often caused by economic instability and poverty. Is your nation taking any direct action to combat the roots of the issue to prevent a future of crime for these individuals?
5. Would it be beneficial to create an international navigation route? What organizations would be able to monitor and determine these routes to avoid infringement?
6. Has your nation privately contracted any maritime security companies? How have these companies impacted the amount of maritime piracy that remains within your nation?

Endnotes

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Topic B: Biological Warfare

Background

Biological warfare is the conscious use of biological agents and toxins to cause widespread disease or death to humans, plants, or animals as a deliberate act of war.⁵¹ Agents that can be used in biological warfare often include a variation of bacteria, viruses, rickettsiae, toxins, and fungi. Biological weapons have a multitude of applications beyond military strategy during times of war. Biological warfare can be used to infect agriculture and livestock to cause economic loss and food shortages, engineer environmental disasters or emergencies, aid in political assassinations, cause widespread illness, and to spread mistrust and fear within the public.⁵²

The use of biological weapons in war is one of the oldest tactics and has been utilized in battle since 600 BCE.⁵³ Armies would poison or pollute the wells of their enemies with cadavers or animal carcass to cause weakness and disease outbreak. This tactic of using dead animal/human matter continued well into the 20th century and was even used during the American Civil War. As time has progressed, biological warfare has used technology advancements to become more precise and deadly. However, errors have occurred along the way due to a lack of medical understanding of how different diseases spread and affect the body.⁵⁴ During this time, the Spanish were at war with the French and utilized biological warfare as an attempt to weaken their adversaries. In 1495 the Spanish began to mix the blood of those with leprosy with wine and sold it to French soldiers who were fighting in Southern Italy. The intent of the use of contaminated blood was to poison French troops and provide the Spanish with an easier battle. While this may seem like an effective way to spread disease, leprosy generally takes over 20 years to advance into the body and is not considered to be an easily spread infectious disease. Another early, but deadly, use of biological agents as an act of war occurred in the New World with the use of smallpox.⁵⁵ The first documented use of smallpox blankets occurred in 1763. The British government had colonized the East Coast of what is now the United States and attempted to seize land from Native American tribes in Ohio Country. After failed attempts to take land by siege the British gave the Native Americans blankets and handkerchiefs that had been used in local smallpox hospitals. The Native Americans then became infected with the disease to which they had no natural immunity for. It was estimated that the smallpox outbreak led to the death of over thirty percent of the Native Americans living in the region.⁵⁶

More precise and premeditated biological warfare began during the first and second World Wars with ambitious projects that have led to the development of modern biological weapons. Beginning with World War I, Germany created covert operations to utilize biological warfare against the Triple Entente (Britain, France, and Russia) as well as the United States. Germany's main strategy was to contaminate their livestock exports with disease, specifically Glanders, to create a lack of resources to countries they were not allied with. The German also utilized the first biological bombs in an attempt to spread cholera into Italy.⁵⁷ These actions led to the creation of the first legislation regarding biological warfare: Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare which is also called the Geneva Protocol of 1925.⁵⁸ During World War II, biological warfare became a practiced tactic by many of the bigger nations involved in the conflict most notably the United States, Germany, Russia, and Japan. Each nation maintained their own

offensive and defensive research projects in reference to biological warfare and allocated large government sponsored grants to these projects to obtain the most up to date technology regarding biological warfare. The research done in this time period laid the groundwork for how the mechanisms of modern biological warfare weapons would function.

Modern biological weapons are composed of two parts: a weaponized agent and the delivery mechanism.⁵⁹ The weaponized agent is the disease-causing organism that is meant to accomplish the task set by those deploying the weapon such as assassinating a specific individual or spreading disease to a targeted population. The agent can be most disease-causing organisms or toxins (poisons obtained from microorganisms, plants, or animals).⁶⁰ Due to the implementation of modern technology, weaponized agents can be synthetically produced in a lab. Advanced technology and research has also allowed for natural agents to be enhanced to allow for accelerated weaponization, production, transportation, and storage.⁶¹ This genetic engineering increases the threat level surrounding biological warfare as newly produced agents can withstand more harsh environmental conditions than ever before and become up to 60% more accurate. The delivery mechanism can take on many different forms. Common examples include bombs, rockets, hand grenades, missiles, and spray tanks that are to be fitted onto vehicles. Smaller delivery mechanisms that are used when targeting a specific individual include brushes, sprays, or injection mechanisms (ex. needle and syringe).⁶²

Widespread technology, such as increased internet access, also provides easier access to biological weapons being acquired and produced outside of governmental organizations. It is a streamlined process for terrorist groups and individuals to acquire the means to create and use these weapons with little obstacles due to widespread advanced technology. A lack of governmental control surrounding biological weapons poses a threat to all civilians as biological weapons can be difficult to trace and pre-incident detecting is still in early phases of research. Due to this increased level of risk the term bioterrorism has been introduced. Bioterrorism is when biological weapons are utilized by terrorist groups with the purpose to intimidate and cause a civilian population or to gain influence on the conduct of a governing body. A recent example of bio terrorism occurred in 2001 with the anthrax attacks (also called the anthrax letters).⁶³ Following the attacks on 9/11 in the United States letters laced with a deadly bacteria, Anthrax, were mailed into the US Postal System to targeted recipients. Five Americans who received letters died and seventeen other recipients became extremely ill.⁶⁴ This bioterrorism was the first act of modern biowarfare in the US and was still being investigated ten years later in 2011. This incident showcased one of the most dangerous elements of bio terrorism; how difficult it is to prove accusations and trace incidents. The investigation of the anthrax letters lasted for a decade due to the lack of history of similar incidents as this disaster utilized modern technology. The US government had no means to trace an incident like this and little legislation surrounding the topic. As technology increases incidents of bioterrorism can occur and present new delivery mechanisms that the current standards on defense can not protect against.

In order to prevent incidents of bioterrorism, biodefense has been introduced into many governmental organizations and research programs. Biodefense is the use of medical measures as an approach to counter bioterrorism or prevent future occurrences. Examples of forms of biodefense include medical research, vaccines, and medicines.⁶⁵ While the influence of technology has made bioterrorism more dangerous, it also has positively impacted biodefense allowing for easier production on large scales and creation of medicine and vaccines. Specifically, recent technological developments have led to better biosurveillance and its main objectives, medical countermeasure development (MCM), horizon scanning, early warning systems, microbial forensics, and risk level assessment.⁶⁶ New technology and research presents a constantly changing subject matter regarding biological warfare. However, it also presents

many challenges surrounding its mitigation, the possession of biological weapons, and defense measures against warfare (both medical and legislative) without imposing on national sovereignty.

United Nations Involvement

The United Nations has been heavily involved with biological warfare since its inception. The precursor to the UN, the League of Nations, passed the first legislation surrounding biological warfare through the Geneva Protocol of 1925. This was signed by 140 different nations and sought to prohibit and condemn the use of biological weapons during international conflicts. The ratification of the protocol was an important step to protect against the misuse of biological weapons, yet it failed on several accounts to address research surrounding biological weapons, stockpiling, production, or the use of biological weapons in retaliation. Due to the stipulations that were not clearly outlined, these were not upheld by many nations in World War II.⁶⁷ Another early action by the UN was the creation of the Biological and Toxin Weapons Convention which was later shortened to the Biological Weapons Convention or the BWC.⁶⁸ This convention was held on April 10th of 1972 and opened a multilateral disarmament treaty that sought to ban the use of biological weapons as well as production, development, and stockpiling. The treaty officially came into effect less than three years later on March 26th in 1975.⁶⁹ With more than forty member states supporting the convention, this was significant as it was the first piece of legislation taken after World War II to end the use of biological warfare.⁷⁰ The BWC has been active since 1975 and has created the Implementation Support Unit (ISU). The ISU works to uphold and maintain the BWC, as well as, collect details from individual member states and assist in implementation of the goals of the BWC in conjunction with biosecurity and biosafety measures.⁷¹ Following the implementation of the BWC and its associated ISU, the UN adopted the Chemical Weapons Convention (CWC), on September 3rd, 1992.⁷² This convention was primarily focused on chemical weapons; however, it also addressed many of the concerns surrounding biological weapons and reaffirmed the goals of the BWC. The CWC went into effect in April of 1997.

The UN has also passed many resolutions regarding biological warfare including WHA/55/16.⁷³ This resolution was passed by the World Health Organization and specifically outlined a response plan for any future incidents of mass biological warfare. The document provides a framework for the World Health Organization to distribute necessary goods and services to those affected by any biological warfare disaster. Part of the framework created by this resolution was utilized by nations during the Covid-19 Pandemic. While this was not a case of biological warfare, some of the methods used in its mitigation originated from WHA/55/16. Additionally, S/RES/1540 was adopted by the Security Council in 2004.⁷⁴ This resolution is significant as it enforces binding clauses on member states to prevent the use of biological, chemical, nuclear weapons, and provides legal grounds for UN intervention to occur between member states.⁷⁵ S/RES/1540 has already led to UN investigations into cases of biological warfare. The most recent example being in Syria in 2013.

Investigating accusations and previous incidents of biological warfare have also been prioritized by the UN with the creation of the Secretary General's Mechanism (UNSGM).⁷⁶ This program is not an official UN body but is managed by the United Nations Office for Disarmament Affairs (UNODA) and was established with A/RES/42/37 by the General Assembly.⁷⁷ It was then reaffirmed and given legal standing with S/RES/620 by the Security Council a year later.⁷⁸ The goals of UNSGM is to permit the Secretary General power to carry

out investigations on any member state dealing with allegations of biological warfare, possession of biological weapons, or any other illicit activities that violate the Geneva Protocol, BWC, or CWC.⁷⁹ The scope of the UNSGM must be to the parameters outlined in previous UN legislation and allegations must come from multiple sources in order to be investigated. The most recent investigation undergone by the UNSGM occurred in 2013 with the UN Mission to Investigate the Allegations of the Use of Chemical Weapons in the Syrian Arab Republic.⁸⁰ The mission found credible information that there was possession of materials to produce biological and chemical weapons. However, an actual release of biological weapons, the focus of the allegations, could not be officially verified.

Case Study: The Syrian Civil War

In 2011, pro-democracy protests began in Syria against President Assad. At a protest the Syrian military fired at protestors sparking a civil war. Since then over 100,000 individuals have lost their lives, and 4.25 million have been named as displaced persons. President Assad's Syrian Arab Republic now faces resistance from the Syrian National Coalition and the Free Syrian Army.

In the Middle East, both chemical and biological weapons have become convenient and obtainable forms of combat due to the consistent political instability that plagues the region. Regimes in this region do not possess the physical capital to invest in advanced research surrounding nuclear weaponry, so biological weapons are used as a substitute.⁸¹ While the total amount of the Syrian stockpile is unknown, it has been projected that the nation possesses a definite capability to engage in biological warfare, and has an arsenal increasing by a few hundred tons of weaponized agents each year.⁸² In a report conducted by Indian Defense and Security, claims have been made that the Syrian stockpile is widespread across the nation's territory in at least 50 different locations, most likely secure bunkers.⁸³ The biological and chemical weapons produced in Syria have been designed with the intent of large-scale military usage. Syria's bioweaponry is also stored as two separate ingredients, the weaponized agent and delivery mechanism, to ensure that detonation comes strictly from the Syrian government.⁸⁴

The Centre d'Études et de Recherches Scientifiques (CERS) which is located in Syria, just outside of the city of Damascus, is known to be the main location for a program that researches and creates offensive bioweapons.⁸⁵ It has also been confirmed that the production and storage of major biological weapons are present at the research facility Cerin.⁸⁶ A survey done by NATO Defense Establishment suggests that these two facilities have allowed Syria to work on projects with agents such as smallpox, cholera, camelpox, ricin, botulinum, and anthrax.⁸⁷ The US Director of National Intelligence claimed that the bioweapons possessed by Syria make the nation capable of mass weaponization.

The pharmaceutical and biotechnology industries in Syria are also suppliers of weaponized agents to the Syrian government and support the production of biological weapons. Currently, the biotech and pharmaceutical industries supply 90 percent of national demand and are multi-million-dollar industries.⁸⁸ In 2010, it was also reported that Syria had the most pharmaceutical companies in comparison to any other Arab nation. Syria allegedly has at least nine firms practicing with modern and mass production techniques, twenty-five mid-sized firms that produce generic pharmaceuticals, and over twenty pharmaceutical factories.⁸⁹ The advancement of these industries further supports the claim that Syria has the capacity to engage in biological warfare and has strong resources to support the use of bioweaponry.

Because of the potential capability of Syria surrounding biological warfare the nation has faced allegations that they have broken the legally binding Security Council resolution S/RES/1540. This resolution prohibits the use of biological, chemical, and nuclear weapons, while also providing legal grounds for UN intervention to occur between member states. The allegations toward Syria began when a whistleblower, government official, reported that Syria was in possession of biological and chemical weapons. If provoked the Syrian government was prepared to detonate them. This was extremely concerning for the UN as Syria was in the midst of a civil war and bringing bioweaponry into an already destructive war would cause a humanitarian crisis.⁹⁰ The official allegations that led to the UN investigations were sixteen separate incidents brought up by the United States defense department. The US feared that Syria was violating the Biological Weapons Convention, as well.⁹¹

The UN investigation began in March of 2013 with the United Nations Office for Disarmament Affairs (UNODA) serving as a steward for the UNSGM.⁹² The investigation was officially established by the Secretary General for fact-finding and named as the UN Mission to Investigate the Allegations of the Use of Chemical and Biological Weapons in the Syrian Arab Republic.⁹³ The investigation only responded to seven of the original sixteen allegations in order to focus on credibility and sufficiency. The credibility regarding the allegations was checked through with various methods including medical assessment of survivors, interviews of survivors and witnesses, collection of background information, and the collection of environmental and biomedical samples. The mission head submitted the final reports to the UNODA and UNSGM in August of 2013 and the findings were then given to the GA at a press conference by the Secretary General.

The UN Mission to Investigate the Allegations of the Use of Chemical and Biological Weapons in the Syrian Arab Republic found upstanding evidence of the production and possession of both biological and chemical weapons. While credible information was present, the UN was not able to find a direct release of biological weapons so Syria is still in possession. However, it was confirmed that chemical weapons had been used in conflict (multiple separate incidents) between the various parties in the Syrian Arab Republic. Because of the confirmed detonation of chemical weapons the UN was able to move forward and remove Syria's chemical weapons and eliminate the Arab republic's chemical weapons program to mitigate further production.⁹⁴ To eradicate all chemical weapons in Syria, the UN joined with the Organization for the Prohibition of Chemical Weapons (OPCW) for the Mission for the Elimination of the Chemical Weapons Programme of the Syrian Arab Republic in October 2013.⁹⁵ The OPCW-UN mission officially confirmed in January of 2016 that all chemical weapons previously owned by the Syrian Arab Republic were completely destroyed. While this investigation and the subsequent eradication of Syrian chemical weapons and weapons program is complete, it has shown the international community's dedication to mitigating biological warfare.

Questions to Consider

1. What protection measures has your nation taken against biological warfare?
2. What biological weapons, if any, does your nation currently possess?
3. What is the accountability level for research and confidential action without violating sovereignty in your nation?
4. What are the main forms of weapons that are used as warfare and what is your nation doing to mitigate them?
5. What are the current risks surrounding bioterrorism?
6. What is the current state of research surrounding biological warfare agents and weapons?

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