

# World Health Organization

## **Joy Zhang**

My name is Joy Zhang and I am honored to be chairing for the first time at this conference. I am a senior at Penfield High School and I enjoy playing the flute as well as participating in a number of academic and leadership activities such as Science Olympiad, Math League, and Student Council.

## **Mira Phillips**

My name is Mira Phillips and I'm a Junior at Penfield High School. This is my first time chairing and I am extremely excited. In addition to Model UN I run Track & Field, participate in Law Explorers at Harris Beach Law Firm, and volunteer at Strong Memorial Hospital.

## **Committee Description**

This committee will be run Harvard Style, indicating that any resolutions written before the conference itself will not be valid. It is recommended that delegates come prepared with a position paper, expressing their country's views on the topics that we will be discussing in committee. Writing and turning in a position paper on the first day of the conference is required in order to be considered for an award.

Whether or not delegates have written a position paper, they will be expected to come prepared with sufficient knowledge of their delegations' policies and the topics listed below. Delegates will be expected to represent their delegations appropriately, present innovative solutions to the issues at hand, and work efficiently with other delegates in order to promote the advancement of global health. It is also imperative that delegates remember that our committee prioritizes cooperation with others over competition in order to most effectively address the pressing issues that we will be discussing. We hope that your experience in this committee will be a constructive part of your Model UN career!

## Yemeni Health Crisis

Since March 2015, the violence and political turmoil of the civil war in Yemen has led to the devastating collapse of the health system. Currently, there are an estimated 15 million people in need of healthcare services, which have become increasingly unavailable as the conflict progresses. Among these services, almost 25% of all healthcare facilities have shut down and the health system has also experienced severe shortages of staff and life-saving medicines.

These shortages have had severe consequences which have further facilitated the collapse of healthcare in Yemen. Shortages of medication such as insulin for diabetes, pills for heart and blood pressure disorders, and cancer medications have left millions without access to treatment. Additionally, blockades caused by warring powers have magnified the problem, specifically by hindering the accessibility of vaccines, leading to the spread of diseases such as H1N1.

The violence of the conflict has also led to the migration of health professionals out of the region for improved stability and professional and financial rewards, leaving many facilities with a dire lack of medically-trained personnel. Furthermore, concerns regarding the safety of medical professionals entering the country have hindered this process.

Additionally, health care facilities have become increasingly inaccessible to many citizens in need of health services due to internal displacement and the difficulty of travel during wartime. Therefore, more than one-third of the population lives in hard to reach areas or regions with limited access to hospitals and clinics.

*What can WHO do to address the shortages of healthcare facilities, medical professionals, and life-saving medicines? What can be done to prevent the spread of H1N1 and other diseases and treat those who have succumbed to them? How should WHO address the lack of accessibility to healthcare facilities during this time?*

### **World Health Organization: Health Situation in Yemen Critical as Violent Conflict Enters Second Year**

<http://www.emro.who.int/media/news/health-situation-in-yemen-critical-as-violent-conflict-enters-second-year.html>

### **Al-Monitor: As Health System Collapses, Diseases Kills More Yemenis**

<http://www.al-monitor.com/pulse/originals/2016/02/yemen-worst-humanitarian-crisis-health.html>

### **United Nations Office for the Coordination of Humanitarian Affairs: Crisis Overview**

<http://www.unocha.org/yemen/crisis-overview>

### **Picture:**

[http://www.aljazeera.com/mritems/imagecache/mbdxlarge/mritems/Images/2015/4/25/73d023031fcc458aa167c144d34b28a1\\_18.jpg](http://www.aljazeera.com/mritems/imagecache/mbdxlarge/mritems/Images/2015/4/25/73d023031fcc458aa167c144d34b28a1_18.jpg)

### **The Global Emergence of Antimicrobial Resistance**

Antimicrobial resistance (AMR) is a major concern that has emerged in the realm of global health. Since the development of antimicrobial drugs, such as antibiotics, antifungals, antivirals, and antimalarials, these medications have been used extensively to kill harmful microorganisms. However, due to the widespread misuse and overuse of these antimicrobial drugs, more resistant forms of harmful microorganisms have been found to grow and give rise to other resistant strains, causing these medications to become less effective.

Because antimicrobial drugs are becoming less capable of combatting these resistant microorganisms, the treatment of diseases such as Malaria, HIV, Influenza, Gonorrhea, and Tuberculosis has become increasingly difficult to carry out. For example, medical professionals predict that resistant forms of Gonorrhea may become widely untreatable in the near future due to the fact that no new vaccines or drugs that can combat the most resistant strains are in development. Additionally, Multidrug-resistant Tuberculosis (MDR-TB) is estimated to cost the global economy \$16.7 trillion by 2050 and claim the lives of as many as 75 million people if nothing is done to combat AMR.

The dire problems that have emerged out of AMR have been widely facilitated by the unnecessary prescription of antimicrobial drugs and their overuse in everyday life. Due to the emergence of resistant microorganisms, rates of treatment failure, prolonged illness, disability, and death due to various illnesses have increased in all parts of the world. The rate at which newly developed antimicrobial drugs become ineffective has made it nearly impossible to keep up with the emergence of newly resistant microorganisms. Additionally, the effects of resistant microorganisms are predicted to drastically increase the cost of healthcare globally, which may be severely problematic in regions where the high cost of healthcare has crippled health systems.

*How should WHO combat the spread and adverse effects of severe illnesses facilitated by AMR? What should be done to raise awareness of the harmful effects of the overuse and improper prescription of antimicrobial drugs? Which should WHO emphasize more in the development of solutions in response to this emerging threat: combatting antimicrobial resistance or facilitating the development of new treatments at a faster rate?*

### **News in Health: Stop the Spread of Superbugs**

<https://newsinhealth.nih.gov/issue/feb2014/feature1>

### **World Health Organization: Antimicrobial Resistance**

<http://www.who.int/mediacentre/factsheets/fs194/en/>

### **USAID: Antimicrobial Resistance and the Threat of Multidrug-Resistant TB**

<https://www.usaid.gov/what-we-do/global-health/tuberculosis/antimicrobial-resistance-and-threat-multidrug-resistant-tb>

### **Picture:**

[https://i1.wp.com/www.themedicalfrontier.com/wp-content/uploads/2016/03/rsz\\_beneficial-bacteria-purple-background.jpg?w=1050&ssl=1](https://i1.wp.com/www.themedicalfrontier.com/wp-content/uploads/2016/03/rsz_beneficial-bacteria-purple-background.jpg?w=1050&ssl=1)

### **Air Pollution in China**

Air Pollution is an emerging problem as more and more countries industrialize. In the recent past, countries undergoing industrialization seem to follow a similar pattern. They industrialize and pollution levels boom. Although the development of environmentally friendly technologies have allowed pollution levels to plateau and possibly even decline, rapidly industrializing countries are still a major point of global concern. China is currently in its industrial phase and pollution levels are rapidly increasing. Due to China's population, and scale of industrialization, the pollution boom is one of the greatest the world has seen.

Tiny particulates from cars, power plants, and numerous other industries create a toxic smog. These pollutants can be toxic to human health, and are the leading cause for respiratory diseases such as asthma and emphysema. In addition, chemicals in these particulates are known to cause cancer and heart disease later in life.

China is home to 16 of the world's most polluted cities, and on average, air pollution decreases the average lifespan by 5 years. A major greenhouse gas pollutant is carbon dioxide;

since 2000, China alone has accounted for two-thirds of the global growth in carbon dioxide emissions. However, it has been shown that these emissions are not solely contained in China. As a result of wind and water currents, these pollutants and chemicals spread across the globe. This process is further facilitated by the Grasshopper Effect, in which pollutants released in warmer climates rise into the air and fall when they reach a colder climate. The spread of pollutants has led to an emerging concern of acid rain, which may be a major complication to global health.

China has made attempts to reduce emissions. Laws have been put in place that set a limit on emission levels, but enforcing these regulations has been difficult due to the decentralized Chinese government. The Chinese government has recently issued a “red alert”. Due to severe smog and lack of good air quality, the Chinese government closed schools, factories, construction sites, and ordered half of all privately owned cars off the road. This however is not a long term solution. If air pollution in China continues to worsen, the health conditions of Chinese citizens and eventually people all around the world will continue to be jeopardized. The persistent smog is leading to a rapid emergence of respiratory illness, and chemicals found in these pollutants have been shown to lead to the development of cancerous cells.

*How can WHO encourage the implementation of stricter pollution regulations? How can WHO raise awareness of the long lasting effects of chemicals and air pollution? What can WHO do to reduce the energy demand in China and limit pollution? What can WHO do for those already suffering from pollution induced respiratory diseases? How can WHO limit the use of toxic chemicals in industry? What are methods that can be used to reduce pollution emissions?*

### **BBC News: What is China Doing to Tackle it's Air Pollution?**

<http://www.bbc.com/news/world-asia-china-35351597>

### **The Economist: The East is Grey**

<http://www.economist.com/news/briefing/21583245-china-worlds-worst-polluter-largest-investor-green-energy-its-rise-will-have>

### **Greenpeace: Reduce Air Pollution**

<http://www.greenpeace.org/eastasia/campaigns/air-pollution/>

### **Picture:**

[http://www.coresponsibility.com/wp-content/uploads/2016/06/air-pollution\\_cropped.jpg](http://www.coresponsibility.com/wp-content/uploads/2016/06/air-pollution_cropped.jpg)

### Cardiovascular Disease

Cardiovascular Disease is a growing concern across the globe. Cardiovascular diseases are mainly caused by the buildup of plaque on the walls of arteries. This buildup blocks the arteries and makes it hard for blood to flow through the body which may eventually stop the flow of blood. This process, also known as atherosclerosis, greatly increases the risks of heart attack and stroke. This buildup can also lead to other complications such as ischemic strokes, heart failure, arrhythmia, and heart valve problems. Tracing back further however, this buildup of

plaque is mainly caused by unhealthy eating and exercise habits. High intake of fats and sugars combined with little exercise can increase the risk of arterial buildup.

Cardiovascular diseases (CVDs) are the number one cause of death in the world, killing about 17.5 million people each year and causing about 31% of deaths globally. Cardiovascular disease is most prominent in low-income and middle-income countries due to the lack of access to healthy lifestyle resources, however, it has been shown to affect all regions of the world. Cardiovascular disease can be easily diagnosed by basic health technologies such as blood pressure tests.

Cardiovascular diseases can be prevented by avoiding tobacco use, eating a balanced healthy diet, and exercising regularly. Many people however lack access to heart healthy food, and busy schedules can make finding time to exercise difficult. Globally, many people do not understand the importance of a healthy lifestyle.

Currently, cardiovascular disease has no evident cure. While symptoms can be lessened by changing eating and exercise habits, once plaque has begun to form, its progression can only be limited rather than stopped. Recently, the development of medications aimed at increasing blood flow has helped to alleviate the symptoms of cardiovascular disease. However, these medications can be costly and are not available to many people who suffer from heart disease in developing countries. Cardiovascular disease has continued to contribute to more and more deaths each year. Prevention is the key to stopping cardiovascular disease, and WHO must work to raise awareness of what a heart healthy lifestyle consists of.

*What does WHO constitute as a heart healthy lifestyle? What can WHO do to raise awareness of the dangers of cardiovascular disease? How can WHO promote a heart healthy lifestyle? What can WHO do to make medicine available for those already suffering with cardiovascular disease? What can WHO do to address the problems that make eating healthily hard for so many people globally?*

**American Heart Association: What is Cardiovascular Disease?**

[http://www.heart.org/HEARTORG/Caregiver/Resources/WhatIsCardiovascularDisease/What-is-Cardiovascular-Disease\\_UCM\\_301852\\_Article.jsp#.V3kj7bgrLIU](http://www.heart.org/HEARTORG/Caregiver/Resources/WhatIsCardiovascularDisease/What-is-Cardiovascular-Disease_UCM_301852_Article.jsp#.V3kj7bgrLIU)

**World Health Organization: Cardiovascular Disease**

[http://www.who.int/cardiovascular\\_diseases/en/](http://www.who.int/cardiovascular_diseases/en/)

**MedicineNet.com: Cardiovascular Disease**

[http://www.medicinenet.com/heart\\_disease\\_coronary\\_artery\\_disease/article.htm](http://www.medicinenet.com/heart_disease_coronary_artery_disease/article.htm)

**Picture:**

[http://www.nature.com/nature/journal/v493/n7434\\_suppl/images\\_article/493S2a-f1.2.jpg](http://www.nature.com/nature/journal/v493/n7434_suppl/images_article/493S2a-f1.2.jpg)