



**ALTITUDE**

Explore. Lead. Innovate

**Altitude UNA-NCA Model United Nations**

**Background Guide**

**World Health Organization**



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# Letter from the Under-Secretary-General

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Hello Delegates, and Welcome to Altitude MUN 2022!

I am so excited to welcome you to this year's conference (in person!) after what have been two very tumultuous years. My name is Kavya Shah, and I am a sophomore at Georgetown University serving as your Under-Secretary for High School Committees. I began my Model United Nations journey in 8th grade, and over the years, MUN has taught me many valuable lessons about cooperation, diplomacy, and persistence.

As you embark on your MUN experience at Altitude, I hope you keep these traits in mind. While each of you will have moments in which you are challenged – whether it be by new experiences, new knowledge, or your fellow delegates – remember that MUN is about learning how to come together despite our differences. In doing so, two things are key: 1) *perspective* – making a good faith effort to understand why and how an individual or nation is pursuing a particular stance, and 2) *debating ideas, not individuals*. With this understanding, you will be able to work towards innovative *and* realistic solutions to some of our world's most pressing issues.

I'd also like to emphasize that Altitude, rather than a competition between delegates, is designed to be first and foremost a learning experience where delegates of all levels can participate and seek support. We expect delegates to keep an open mind and be willing to learn from each other throughout the conference.

Our conference centers around the UN Secretary General's [Our Common Agenda](#) report which outlines 12 commitments designed to accelerate global collaboration and progress towards the SDGs. Furthermore, we draw inspiration from the [UN Secretary-General's Top 10 Priorities for 2021](#). As you look towards resolutions in your respective committees, we advise that you reference these reports and draw from their conclusions. Consequently, your preparation for the conference should go beyond the given background guide and delve into the specifics of your nation's stance and past collaborative efforts.

We look forward to seeing each of you at Altitude MUN 2022 in New York City! Please do not hesitate to reach out in the meantime with any questions or concerns.

All the best,

Kavya Shah  
Under-Secretary-General of High School Committees

# The Committee

## World Health Organization

### Committee Overview

In 1945, diplomats from around the world gathered in San Francisco, California to negotiate the structure of a document that would eventually become the Charter of the United Nations. Further discussions by these diplomats led to the 1946 International Health Conference in New York City, where 61 states signed the Constitution of the World Health Organization. This document, which came into effect on April 7, 1948, is the basis of the **World Health Organization (WHO)**. As a part of the United Nations, WHO is tasked with monitoring the world's health situation, leading the world's health research agenda, setting international standards for health care, and making policy recommendations to national health ministries and governments to conduct international health studies. As such, the organization acts as a specialized UN agency and reports directly to the **United Nations Economic and Social Council (ECOSOC)**.

The WHO consists of two main management structures. The **World Health Assembly (WHA)** is made up of representatives from 194 member countries and determines international health policies. The **General Assembly of Health** also recruits the WHO Secretary-General to oversee the

organization's finances. The WHO Board of Directors, consisting of 34 medical professionals elected for three years, carry out the managerial work of the organization and the resolutions of the Health Council within the authority of WHO. Moreover, the organization is currently headquartered in Geneva, Switzerland. The current Director-General of WHO is Dr. Tedros Adhanom Ghebreyesus



In 2008, WHO adopted the "**Six Point Agenda**" by Director-Margaret Chan. These include:

- Promoting health development, especially in areas of extreme poverty.
- Promoting health and safety, especially in an urbanized world.

- Strengthening access to health systems and health.
- Leveraging your research by setting a research agenda and setting international health standards.
- Building partnerships with civil society, governments, businesses, and more to encourage strategic partners to improve their health.
- Improving performance by reforming WHO to be more effective and efficient in managing international health conditions.



The WHO Constitution sets out some accountabilities and purposes for the body. The organization's powerful tools include passing resolutions and making decisions on behalf of organizations, setting international guidelines on issues ranging from food and agriculture to the pharmaceutical industry, and professional and targeted members within the organization. This includes the ability of the organization to provide support where needed and to standardize medical and health practices. To function effectively as

an organization, Member States must always be aware of the objectives of the organization, as the WHO Constitution contains a preamble that sets out all the principles that an organization calls for development. The preamble defines the term "health" as "a state of complete physical, mental and social well-being, as well as being free of illness and illness." This definition underlies the organization's goal of achieving "the highest possible level of health" for all.

WHO operates on the notion that health is a universal human right, especially since it forms the basis of peace and security in all states. Therefore, all WHO member states are committed to promoting the protection and realization of the health of all others beyond their own. In addition, WHO emphasizes that the government has major accountability over the health of its people, but some countries cannot find a way to achieve the highest possible level of health. Therefore, the WHO undertakes tasks such as supporting the Member States, providing guidelines through the development of international guidelines, and participating in battles to eradicate illnesses.

The WHO's biennial program budget, approved by WHA, is derived from its multi-year work program and is funded by a combination of assessed and voluntary donations. Fixed membership fees consist of membership fees paid by WHO Member States, which are calculated in proportion to wealth and population. Although the number of mandatory contributions is steadily increasing, the increase in the number of

voluntary donations means that the relative number of mandatory contributions has gradually decreased over the last decade.



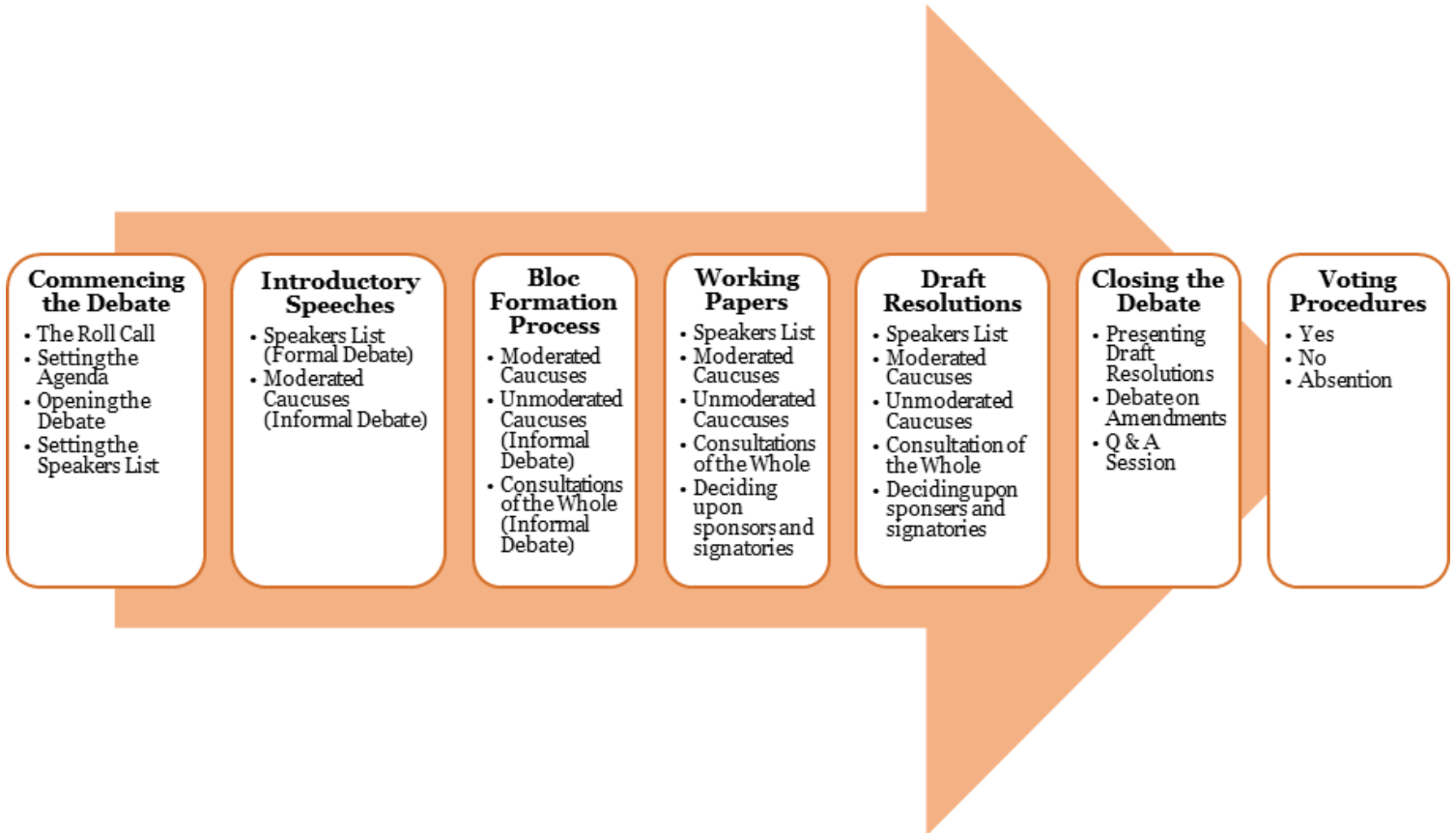
Nonetheless, the assessed contributions provide a substantial and predictable source of funding that avoids reliance on the

narrow base of public and private donors. Voluntary donations are made by WHO Members and other partners such as non-governmental organizations (NGOs), academic institutions, and private companies, in addition to the valued donations. These donations can constitute a core voluntary donation that is assigned to a specific WHO program or any element of the WHO biennial program budget. WHO Financing is a part of the WHO Financing Reform Process, which began in January 2010, which balances WHO financing across key business areas within the Member States and other stakeholders. A funding dialogue aimed at improving the transparency and predictability of the organization's budget has been established.

# At a Glance: The Conference

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## The Flow of Debate



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## Key Terms and Concepts

- **Absolute Majority:** Also known as a two-thirds majority, an absolute majority is  $\frac{2}{3}$  of the quorum (or 66.7% of the quorum). Assuming a committee quorum is 60, the absolute majority would be two-thirds of 60, which is 40.
- **Decorum:** The constant order and respect expected from all members of the committee throughout the Conference.
- **Draft Resolution:** Once delegates have compiled their ideas through the working paper, delegates must transform them into an official resolution format. This formal document is known as a Draft Resolution. The reason behind it incorporating the word 'draft' is because the resolution is yet to be adopted by the Committee. Moreover, a Committee may have more than one Draft Resolution but it can only have one official resolution at the end.



- **Friendly Amendment:** Amendments are considered **friendly** if all of the sponsors of the original Draft Resolution agree to it.
- **Interruptive Points:** Interruptive points are those that can be put forth at any time during the debate process. However, at Altitude MUN, the interruptive points cannot be used to interrupt a delegate giving a speech.
- **Motion:** Delegates will use motions to move from one part of the debate to another. As such, motions will be the outlet used to decide upon the next course of action throughout the conference.
- **Non-Interruptive Points:** Unlike interruptive points, non-interruptive points can only be used when a Chairperson explicitly asks if there are any points or motions on the floor.
- **Point:** Contrary to motions, which delegates put forth to decide upon the next course of the debate, points are used for the sole purpose of facilitating the conference's procedure.
- **Present:** Delegates can vote on a resolution with 'yes', 'no', or 'abstention'.
- **Present and Voting:** Delegates have to vote on a resolution with either a 'yes' or 'no'.
- **Roll Call:** The first part of the Conference is known as the roll call. During the roll call, the name of each participating nation will be called aloud in alphabetical order by the Dais. Delegates can either respond with 'present' or 'present and voting'. A roll call will be taken everytime delegates reconvene at the conference setting after postponement of the debate.
- **Sponsors:** The nations that have contributed the most in terms of developing a particular document, particularly the Draft Resolution.
- **Signatories:** Signatories are nations that wish to see a certain document debated. Signatories do not have to be members of the bloc writing the document.
- **Simple Majority:** A simple majority is 50% of the quorum plus '1'. For instance, let us assume that the quorum for a committee is 60. Therefore, the simple majority for this committee would be 31.
- **Quorum:** The total number of nations present at the committee.
- **Unfriendly Amendment:** Amendments are considered **unfriendly** if at least one of the sponsors of the original Draft Resolution disagrees with it.
- **Working Paper:** The first step in the resolution formation process, the working paper is an **informal document** where delegates can begin gathering ideas and forming solutions in point format. It essentially a 'rough draft' of the Draft Resolution that will follow.
- **Yields:** If a delegate finishes their Speakers List speech and still has some speaking time to spare, they must yield their time. Delegates can either yield their time to the Chairperson, to questions, or to another delegate. Delegates should note that they only have the option to yield their time during the formal debate (the Speakers List).

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## Rules of Debate

### Written Motions

Instead of voicing them aloud, these motions are written on formal notes and delivered to the Chairperson by way of an Usher.

#### Format:

**From:** Delegates should insert the full names of their nations here.

**To:** Chairperson

#### Purpose:

- **Appeal to the Chairperson's Decision:** If the delegate wishes to motion for an appeal to the Chairperson's decision, the purpose should look similar to the following:

*"The delegate of (insert full name of nation) motions for an appeal to the Chairperson's decision because (insert reasoning behind the appeal)."*

- **Right of Reply:** If the delegate wishes to motion for a right of reply, the purpose should look similar to the following:

*"The delegate of (insert full name of nation) motions for a right of reply to (insert full name of target nation) because (insert reasoning behind the right of reply)."*

### Verbal Motions

These motions can be verbalized aloud when the Committee Chairperson opens the floor for any points or motions. One significant aspect to take into account is that verbal motions need to be seconded.

#### The Debate

*"The delegate of (insert full name of nation) motions to open the debate to discuss (input the Committee topic)."*

- **The Speakers List**

*"The delegate of (insert full name of nation) motions to set the Speakers List for a speaker's time of (insert the suggested length of speaking time per delegate)."*

**To pass, this motion requires a simple majority.**

- **Moderated Caucus**

*“The delegate of (insert full name of nation) motions to suspend the debate and move into a moderated caucus with a total time of (insert total duration of the caucus) and a speaker’s time of (insert the suggested length of speaking time per delegate) to discuss (insert desired topic).”*

**To pass, this motion requires a simple majority.**

- **Unmoderated Caucus**

*“The delegate of (insert full name of nation) motions to suspend the debate and move into an unmoderated caucus for a total time of (insert total duration of the caucus) to (insert desired purpose of unmoderated caucus).”*

**To pass, this motion requires a simple majority.**

- **Consultation of the Whole**

*“The delegate of (insert full name of nation) motions to suspend the debate and move into a consultation of the whole for a total time of (insert total duration of the caucus) to discuss (insert desired topic of discussion).”*

**To pass, this motion requires a simple majority.**

- **Adjournment and Resumption of Debate**

*“The delegate of (insert full name of nation) motions to adjourn the meeting for the purpose of (insert the purpose of adjournment).”*

*“The delegate of (insert full name of nation) motions to resume the debate.”*

**To pass, this motion requires a simple majority.**

- **Closure of Debate**

*“The delegate of (insert full name of nation) motions to close the debate and move into the introduction of draft resolutions.”*

**To pass, this motion requires an absolute majority.**

- **Debate on Amendments**

*“The delegate of (insert full name of nation) motions to close the introduction of draft resolutions and commence the debate on amendments.”*

**To pass, this motion requires an absolute majority.**

**To pass, each amendment requires a simple majority.**

- **Voting on Resolutions**

*“The delegate of (insert full name of nation) motions to close the debate on amendments and commence the Resolution voting procedure.”*

**To pass, this motion requires an absolute majority.**

**In order to pass and become the Committee’s official Resolution, the Draft should garner at least a simple majority.**

## Points

### Interruptive Points

- **Point of Personal Privilege:**

This point can be utilized by a delegate whenever they experience a certain personal discomfort that hinders their ability to fully participate in the conference at hand.

- **Point of Order:**

A point of order is brought up when a delegate feels as though the rules of procedure have been broken.

### Non-Interruptive Points

- **Point of Parliamentary Inquiry:**

This point can be used whenever a delegate would like to ask the Dais members a question regarding the overall rules of procedure.

- **Point of Information:**

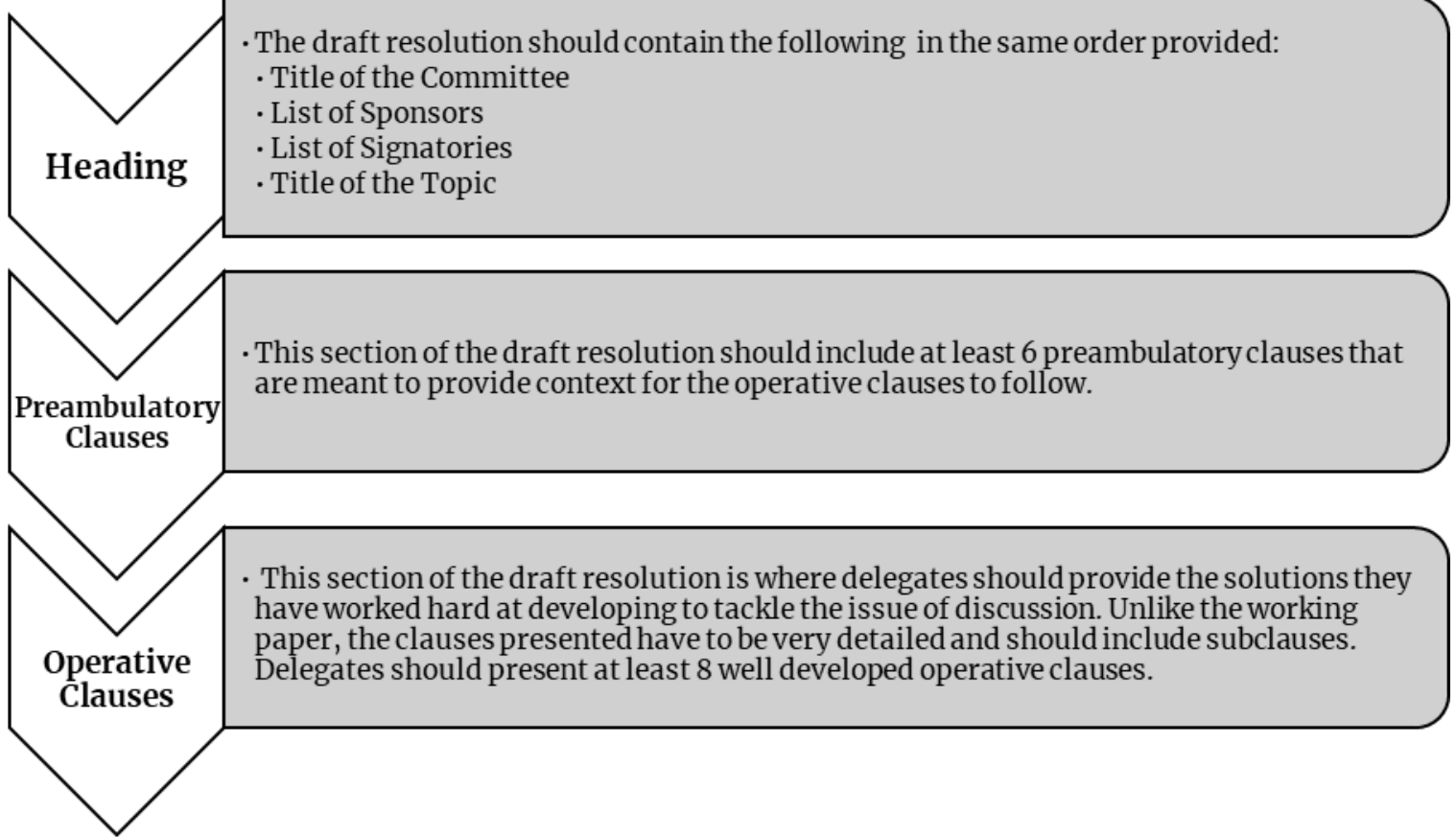
A point of information, also known as a point of inquiry, can be exercised by delegates whenever they would like to ask a question regarding something they do not understand about the issue at hand.

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## Resolution Formation Process



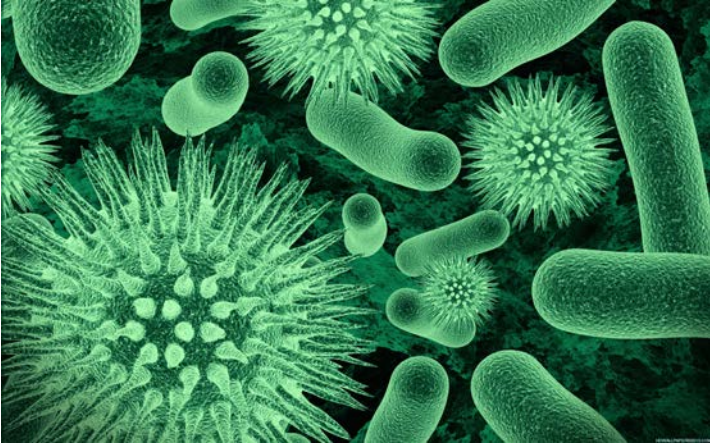
## Flow and Structure of a Draft Resolution



# The Topic

## 'Addressing the Global Health Inequities Present in Treating Noncommunicable Diseases'

### Topic Overview



In the age of the COVID-19 pandemic, the world's primary health focus has been shifted primarily towards **communicable diseases**. Also referred to as infectious diseases, these are illnesses caused by bacteria or viruses that can be transmitted from one person to another through a variety of manners. Media outlets and public policies have focused primarily on infectious diseases such as the human immunodeficiency virus (HIV) and the Ebola virus, in addition to COVID-19.

In turn, **noncommunicable diseases (NCDs)** have taken a backseat while infectious diseases have taken up the spotlight. Contrary to their communicable counterparts, NCDs are illnesses that cannot be contracted by way of transmission. Yet, people with NCDs find themselves highly vulnerable to communicable diseases,

especially given how they can significantly influence the individual's overall mortality rate. Given their prevalence and dangers, NCDs must be placed back at the forefront of the global health agenda.

Non-communicable diseases (NCDs) cause two-thirds of all deaths worldwide. In 2012 alone, NCDs were involved in 38 of the 56 million deaths globally. With the projected increase in these numbers, great efforts have been made not only by the World Health Organization (WHO) but also by many major United Nations (UN) agencies such as the General Assembly (GA) and the Economic and Social Council (ECOSOC). Nevertheless, this continues to not be enough, as evidenced by how NCDs continue to account for well over 70% of global deaths. Addresses the origin and impact of NCDs. Tackling NCDs is currently one of the top six WHO leadership priorities, which emphasizes the crucial nature of addressing both the origins and impacts of NCDs.

What should be of particular note is how NCDs are disproportionately burdening low- and middle-income countries, thereby offsetting the benefits of reducing poverty and improving their overall quality of life. In addition, many NCDs are resource-intensive treatments. Wisely, the problem is exacerbated in already resource-constrained healthcare systems around the world. This

highlights the global health inequity present when it comes to treating NCDs, as developed nations do not suffer from these same setbacks.



Most NCDs are chronic diseases that are often strongly correlated with environmental and lifestyle choices, such as the consumption of alcohol and the use of tobacco. The WHO defines four major NCD types as cancer, cardiovascular disease, diabetes, and chronic respiratory disease. Together, these four groups account for 82% of all NCD-related deaths. Therefore, various efforts must be made to reduce the incidence of NCDs and to prevent further associated deaths. Since their spread poses direct challenges to many aspects of human development, NCD efforts are essential to the international community, especially to fully achieve the Sustainable Development Goals (SDGs) by 2030.

### Diabetes

**Diabetes** is a chronic, mostly preventable, disease that can lead to cardiovascular disease, blindness, renal failure, loss of limbs, and death. It causes significant pain and distress in about 60 million people in

Europe alone, thereby straining local economies and healthcare systems.

The prevalence of diabetes is expected to reach 10.2% globally, which translates to approximately 578 million people affected by the disease. This increase is strongly associated with an increasing trend of obesity that is accompanied by an unhealthy diet, a lack of exercise, and overall socioeconomic disadvantages. These risk factors also contribute to the development of other potential NCDs, thereby emphasizing its position as an international public health priority. Diabetes prevention must therefore be integrated into national strategies.



There are several types of diabetes, each of which is accompanied by a different set of characteristics. These include:

- **Type 1 diabetes** is characterized by a defect in insulin production and requires daily administration of insulin. According to current research, type 1 diabetes is inevitable. Symptoms include excessive urination (polyuria), thirst (polydipsia), constant hunger, weight loss, hazy eyes, and malaise. These symptoms

can appear suddenly, and the illness can manifest as an acute condition.

- **Type 2 diabetes** results from the body's ineffective use of insulin (insulin resistance). It affects 90% of diabetics worldwide and is mostly preventable. Excessive weight, lack of exercise, and high intakes of saturated fat, especially around the waist, independently increase the risk of insulin resistance. This risk is already increased by a slight weight gain in the normal range (body mass index less than 25). The development of type 2 diabetes is also associated with other factors such as ethnicity, early experience and impact, as well as socio-economic factors. Symptoms can resemble those of type 1 diabetes but are often less noticeable. As a result, the disease is often diagnosed years after onset after severe complications start to occur. Type 2 diabetes, which until recently was thought to be a middle-aged disease, has a high incidence in all age groups and progresses from adolescence to childhood. Impaired glucose tolerance (IGT) and impaired fasting glucose (IFG) are intermediate states in the transition between being normal and diabetic. People with IGT or IFG are at increased risk of developing type 2 diabetes, which is not inevitable.
- **Gestational diabetes** is a result of hyperglycemia (high blood sugar) that begins during pregnancy or is first detected during pregnancy. The

symptoms of gestational diabetes are similar to type 2 diabetes. Gestational diabetes is often diagnosed by prenatal screening rather than reported symptoms. Although this is generally temporary, women with gestational diabetes can develop type 2 diabetes later in life.

## Cancer



According to the WHO, cancer consists of a group of diseases, each of which can begin within practically any organ or tissue in the body. However, the unifying characteristic of all forms of cancer is the uncontrollable growth of an abnormal cell. one of the leading causes of death globally, with approximately 7.6 million deaths in 2008 (13% of all global deaths). Cancer mortality is projected to reach 11 million by 2030, most of which will occur in the world's least responsive regions. However, cancer is not only a personal, social, and financial burden, but also a potential social consequence within everyday life functions.



Cancer patients can significantly extend their lifespans by a number of years if exposed to effective prevention and treatment strategies. The 2011 UN General Assembly special session helped draw attention to important aspects of cancer prevention and management. First, cancer is largely preventable by viable means. Second, cancer is one of several chronic non-communicable diseases that share a common risk factor for prevention and management to benefit the majority of the world's population. Third, some cancers may be due to infectious causative factors (for example, HPV, HBV, H. pylori, parasites, and influenza). Moreover, strategies to control the burden of infectious diseases are related to cancer control. Fourth, the natural history of non-communicable diseases, including cancer, is a social, economic, and environmental determinant of primary prevention, diagnosis, treatment, care, and health (for example, poverty, illiteracy, gender inequality, marginalization, rising stigmatizations, up to socio-economic status).

Session 1 of the 4th International Conference on Cancer Control (ICCC4) acts as a social, economic, environmental, biological, and behavioral modifier of cancer risk through plenary presentations and four interactive workshop discussions. The workshop session covered included:

- The world's adult tobacco survey in high-burden, low- and middle-income countries and the social determinants of tobacco use.

- The role of alcohol-containing diet and physical activity in improving the risk of cancer and other non-communicable diseases.
- The role of infection in changing cancer risk.

Public policies and measures can be implemented to effectively reduce cancer risk at the population level. An example of such an action is the 2020 WHO prevention strategy that targeted the elimination of cervical cancer by vaccinating 90% of girls by the age of 15 and screening 70% of women by the age of 35.



For some factors, more work is needed to develop a simple and effective instrument. Given that many of these factors are common to both cancer and other NCDs, cancer prevention is seen in the broader sense of NCD prevention, including the general public, medical and other professionals, workplaces and institutions, and the media. Many policies and plans should be implemented in different settings to control the drivers of changeable factors and to promote health and well-being. The mapping, analysis, and contextualization of these relevant guidelines help facilitate

cancer prevention interventions in a variety of situations.

## Topic in Depth

### *NCDs as a Result of Malnutrition*

Malnutrition is a major risk factor for NCDs such as type 2 diabetes, coronary artery disease, hypertension, osteoarthritis, fatty liver, inflammation, sleep apnea, and certain types of cancer. WHO defines malnutrition as insufficient, excessive, or imbalanced human energy and/or nutrient intake. The general assumption is that a malnourished individual has to be very thin and frail. The assumption is also that malnutrition is caused by inadequate food intake and nutritional status. However, malnutrition can be broadly divided into two categories: undernutrition and overnutrition.



**Undernutrition** may lead to stunted growth and an overall lack of micronutrients. On the other hand, **overnutrition**, which is the unbalanced overdose of nutritionally unnecessary foods, leads to extreme weight gain and subsequent obesity. Together, both types of malnutrition are the result of

unhealthy and poor nutrition. There also exists the possibility of both nutritional statuses occurring in the same person at different stages of life. Interestingly, malnutrition in childhood is a risk factor for obesity and non-communicable diseases in later years, in addition to affecting survival, growth, development, health, academic, and financial outcomes. Obesity is now a global epidemic and is a major public health burden and risk factor for the development of non-communicable diseases.

Multifactorial causes of obesity include various genetic, dietary, environmental, and lifestyle variables that are combined to create an imbalance between energy intake and energy expenditure. Eating large amounts of nutrient-poor foods deprives the body of essential enzymes that require specific nutrients to carry out the chemical reactions essential to human survival, resulting in physiological dysfunction and subsequent **morbidity** and mortality. Morbidity is the term used to refer to the condition of someone suffering from any disease. Many years of untreated NCDs can and do ultimately lead to death.

**Heart attack** (which can be caused by cardiovascular disease, uncontrolled hypertension, atherosclerosis, sleep aspiration) or **stroke** (type 2 diabetes, hypertension, and embolism due to cancer) both can occur suddenly. Moreover, these conditions progress rapidly and can lead to death. NCDs are minimally symptomatic and involve years of systemic damage that can be life-threatening. Fortunately, however, there are ways to protect communities from

the long-term risks associated with NCDs. Commitment to a diet and lifestyle that best supports and enhances the functioning of the human body can prove to be among the best routes to evading NCDs. A nutritionally optimal diet is mostly plant-based, rich in vegetables and fruits, whole grains, legumes, nuts, seeds, and only moderate amounts of foods high in carbohydrates, sugar, and saturated fats. Regular and consistent intake of healthy foods and nutritious diets can help you achieve and maintain a healthy weight and prevent or slow the progression of NCDs. The burden of NCDs impedes human development in Sub-Saharan Africa through negative impacts on education, income, life expectancy, and other health indicators. As a result of poor financial resources and infrastructure, professionals often find themselves overwhelmed and incapable of effectively combating the burden of NCD illness.

### *Early Human Development and Risk of NCD Development*

Epidemiological studies and years of study in various countries confirm the observation that early human development affects the risk of NCD in later years. Importantly, the risk is graded over the normal developmental range, at least as measured by surrogate measurements such as birth weight. Certain aspects of the developmental environment, such as maternal diet and body composition, have also been shown to influence risk factors for later illness. For example, studies show that the mother's energy intake in late pregnancy is related to

the thickness of the carotid intima (an early marker of vascular disease) in 9-year-old children. This is an effect amplified by the weight of the child. 9 years old. Since these studies were conducted in an unselected population of European cities, they clearly showed how risk is placed within normal human development.

Understanding why human development can affect the predisposition to NCDs, even under normal circumstances, can help from an evolutionary perspective. The basis of this is that Darwin's fitness (for example, reproductive success), longevity, and health are not the same, and processes that affect fitness, such as natural selection and sexual selection, do not affect health, but longevity. The concept that can affect. In the context of these basic evolutionary processes, we can consider the changes that have occurred in human societies, especially in advanced societies, over the last few decades. Infant mortality has dropped dramatically, and life expectancy has increased significantly. Life expectancy is estimated to increase by approximately 6 hours/day. In addition, many aspects of fitness are influenced by life history characteristics (for example, adolescent age), which change with changes in our reproductive behavior. We now live in an evolutionarily innovative environment. These environments include energy-dense diets, disproportionate macronutrient, and micronutrient diets, reduced energy consumption, new physical environments (such as artificial light), new social pressures, and changes in symbiotic

environments. included. Therefore, humans are maladapted in many situations.

Because we are challenging environmental conditions beyond our evolved adaptability, or new environments and challenges that we have never faced in our evolution. Vital and social changes mean that this discrepancy is exaggerated in many societies. Fetal developmental restrictions are greater in older primipara, multiple births, teenage pregnancies, and women who are on a diet before or during pregnancy. All of these conditions are becoming more common around the world due to pressure to shrink families, reproductive behavior, and lifestyle changes. In addition, as the balance between energy intake and consumption becomes more obese, children are more likely to be mismatched, even if prenatal development is not severely impaired.

Similar to the effects of undernutrition, the effects of maternal obesity appear to be within normal limits. This is because a 40% increase in the maternal obesity index (kg/m<sup>2</sup>) was associated with an increase in childhood obesity at age 4.

Doing so seemed to be done in stages beyond this range. Finally, the constraints of pregnant mothers and the effects of obesity interact. For example, more studies showed that pregnancies in mothers were associated with body fat percentage in offspring aged 28-31 years, but this effect was significantly greater in first pregnancies than in multiple pregnancies. In this regard, the rapid decline in family size due to socio-economic progress could lead to proportionally more

first births, and an even more important factor in China, where NCDs are currently a very big issue. There is a possibility of becoming. Therefore, we envision overlapping multi-generational cycles of chronic disease. Chronic malnutrition leads to growth retardation and low weight gain during pregnancy and is associated with an unbalanced diet during pregnancy. However, in some individuals, subsequent increased risk of obesity, insulin resistance, and gestational diabetes may lead to a further increased risk of next-generation NCDs, potentially perpetuating the risk cycle. Therefore, the incidence of NCD is expected to increase over several generations unless effective interventions are found soon.

### *Global Non-communicable Disease Network*

The WHO Global Non-Communicable Diseases (NCD) Platform (GNP) is a division headed by the Deputy Director of WHO. The overall purpose of GNP is to coordinate the United Nations system, mobilize non-state actors, and help governments develop government-wide and society-wide responses to achieve sustainable achievements. The platform has the capacity to and the potential for change to complement and enhance WHO's work. Moreover, the platform targets Sustainable Development Goals (SDGs) 3, 4 and other NCD-related SDGs. This work was accomplished using two very powerful missions: the Global Coordination Mechanism for NCDs (GCM) and the United Nations Inter-Ministry Task Force on Prevention and Management of NCDs given by the World Health Assembly and the United Nations Economic and Social Council (ECOSOC).



The GNP exists to help non-communicable diseases stay on the political, health, and development agenda. To achieve this, the Department supports the global, regional, and national implementation of the recommendations and commitments of the UN General Assembly's High-Level Conference on Non-Communicable Diseases, across the sector and stakeholders. These efforts involve a variety of stakeholders, including UN agencies, intergovernmental organizations, parliamentarians, civil society, the private sector, charities, and academia.

As part of its mission, GNP is working on many cross-cutting initiatives involving different teams from three levels of WHO and six regional and partner organizations. GNP's strategic priorities include:

- Promoting and strengthening partnerships, governance, coordination, and accountability.
- Advocating high-level resource mobilization.
- Capacity building for sustainable impact at the state level.

In addition to GCM and UNIATF, GNP works on the WHO Civil Society Working Group on NCDs, implements recommendations from WHO's independent high-level committee on NCDs, and

other highly visible multi-partners in collaboration with the WHO region.

## Pertinent Features

### *Effects of Climate Change on NCDs*

The WHO has identified climate change as one of the greatest health threats of the 21st century and air pollution as the greatest environmental health risk. Treatment costs can be heavy on governments and individuals, thereby placing a significant burden upon limited resources.

The expansion of our international commitment to NCDs over the last decade initially focused on four risk factors:

- Tobacco use
- Harmful alcohol use
- Unhealthy diet
- Lack of exercise

Exposure to each of these risks has a strong element of individual choice, and responsibility is often placed on the individual rather than the broader social response. However, these risks are also strongly influenced by social determinants such as commodity prices, production methods, marketing, social norms, and, in the case of activity levels, the physical environment. Many other risk factors for non-communicable diseases are more closely associated with environmental pressures and climate change.

The health effects of air pollution, as is generally believed, indicate that NCDs are not just the result of lifestyle and personal choices. Recommendations for staying indoors, especially avoiding walking on polluted streets, or wearing face masks during episodes of high air pollution indicate inadequate individual response to a wide range of serious problems.



The ultimate cause of air pollution and subsequent NCDs are the energy sources that are currently powering our transportation, power generation, industry, and food production systems. The link between the sources of air pollution in the region and the emissions that cause climate change is very clear. It is estimated that about 25% of urban air pollution from particulate matter is due to transportation, 15% is due to industrial activities, including power generation, and 20% is due to the burning of household fuels. (The remaining 22% is unspecified). All in all, the source is human, with only 18% being a natural source. Exposure to indoor air pollution is primarily due to the use of solid fuels for cooking in low-income households. Such exposure affects nearly 4 million people annually, of which nearly 3 million die. Such deaths are typically resultant from NCDs such as lung cancer, chronic obstructive pulmonary disease, ischemic heart disease, and stroke.

For comparison, the International Panel on Climate Change estimates that global greenhouse gas emissions result from transport (14%) and energy, which includes electricity and heat generation (35%), industry (21%), buildings (6%), agriculture, and land-use changes (24%). Five causes of climate change

and air pollution, and therefore many burdens of NCDs, are the same: pollution of the energy system. Black carbon, produced by inefficient combustion in sources such as stoves and diesel engines, is the second-largest source of global warming after carbon dioxide.



The second-largest cause of global warming is methane, which reacts with other pollutants to form ozone, causing 230,000 deaths from the chronic respiratory disease worldwide each year. Therefore, it becomes necessary to eliminate the immediate causes of climate change to effectively prevent the development of NCDs such as stroke and death from cardiovascular disease. Shifting from solid fuel pollution to clean and sustainable energy in low-income households can substantially reduce deaths from indoor air pollution. Moreover, introducing reliable renewable energy to off-the-grid medical facilities enables the essential cooling of medical supplies and lighting of critical services to provide NCD care.

### *Outcomes of Equity and other Social Determinants*

Structural determinants and conditions of daily life are important for considering social determinants of health as well as explaining and coping with health inequality. As with other

health issues, general social and economic conditions affect people's exposure and susceptibility to NCDs, as well as other related and medical outcomes. The burden of NCDs, which is rapidly increasing in developing countries, is not only accelerated by the aging population, as it is also caused by the negative effects of globalization, such as unfair trade and irresponsible marketing, rapid and unplanned urbanization, and an increasingly sedentary lifestyle. People in developing countries eat foods with high total energy content. Furthermore, elevated NCD levels are affected by many factors, including tobacco use and availability, cost, salt, fat, and sugar-rich food sales.

A significant amount of global marketing aims to encourage children, adolescents, and women in developing countries to smoke cigarettes and consume "junk food" and alcohol. Rapid and unplanned urbanization is changing people's lifestyles as they are exposed to common risk factors. NCDs are exacerbated in urban areas by changes in diet and physical activity, exposure to air pollutants (including cigarette smoke), and the use of harmful alcohol.

Overwhelmed by the pace of growth, many governments are not keeping up with the constant expansion of infrastructure and service needs, and people are less likely to be protected by policies such as smoking cessation laws, the phasing out of trans fatty acids, protection against harmful alcohol use, and city planning that encourages physical activity. As a result, vulnerable and socially disadvantaged people get sick and die sooner than those with higher social status. There is strong evidence of poverty and reduced life expectancy, and a link between various social determinants, especially education and the general level of NCDs. People

with low social and economic status are much worse in countries of all levels.



For example, in Singapore, the prevalence of lack of exercise, daily smoking, and regular drinking was found to be consistently highest among the least educated men and women. In the United States, another four years of school education is associated with a reduced risk of heart disease and diabetes. In Australia, female workers had a significantly higher incidence of cancer, and in Spain, female workers had a higher incidence of metabolic syndrome than other female workers. Diabetes is more common among Australian and Dutch immigrants, but Canadian immigrants also have a higher mortality rate from ischemic heart disease. In Finland, consumption of saturated fat increased as personal income declined. Similarly, in low- and middle-income countries, there is an increasing number of studies showing the link between NCDs and certain social determinants, especially education and income levels. In China, poor education and urban residence are strongly associated with an increased risk of diabetes. The results of a recent study in India also showed that tobacco use, hypertension, and lack of exercise were significantly more common in the less educated group. In Vietnam, similar to harmful alcohol use in Nepal, cardiovascular mortality in





- Target 3.6 aims to reduce fatalities associated with road accident injuries.
- Target 3.8 aims to achieve universal health insurance. This affects a wide range of interventions to promote, prevent and treat NCDs.
- Target 3.9 aims to reduce toxic chemicals, air, water, soil pollution, and pollution-related deaths and illnesses.

## Global Efforts

### World Diabetes Day



World Diabetes Day is the world's largest diabetes awareness campaign, reaching over 1 billion worldwide audiences in more than 160 countries. This campaign focuses on the most important issues for the world of diabetes and keeps diabetes firmly in the public and political spotlight. It occurs every year on **November 14th** and is celebrated on the birthday of Sir Frederick Banting, who discovered insulin at Charles Best in 1922.

World Diabetes Day was founded in 1991 by the International Diabetes Federation (IDF) and the World Health Organization in response to growing concerns about the threat of diabetes to health. World Diabetes Day became the official United Nations Day in 2006, with UN resolution 61/225 passed.

The purpose of the World Diabetes Day campaign is to promote IDF advocacy activities throughout the year. It aims to also become a global engine to promote the importance of collaborative action to combat diabetes as a major global health problem. The campaign is represented by the blue circle logo adopted in 2007 after the UN resolution on diabetes was passed. The blue circle is a global symbol of diabetes awareness. This symbolizes the unity of the global diabetes community in response to the diabetes epidemic.

### The NCD Alliance



The NCD Alliance is an association of 2,000 associations, civil society organizations, scientific experts, and academic studies to improve the prevention and management of non-communicable diseases around the world. It is a civil society network that brings together institutions. The NCD Alliance aims to promote the NCD Agenda as a philosophical leader in policy and practice, an organizer of civil society movements, a partner with the government, and an advocate for those at risk or living with NCDs.

The NCD Alliance sought government commitments that would lead to six broader outcomes:

- Governmental accountability for the NCD program that must be measured.

- The Framework Convention on Tobacco Control (FCTC) must be fully implemented
- Global efforts to prevent the avoidable
- A globally agreed approach to the treatment and care of NCDs
- Resources for providing global NCD intervention

Today, the NCD Alliance is at the forefront of combat with a strong global network of more than 2,000 organizations in 170 countries, the World Health Organization, the United Nations, strategic relationships with governments, and staff in Geneva, London, and New York. The organization's network includes global and national NGOs, academic and professional associations, academic and research institutes, private companies, and dedicated individuals.

### *The mHealth Initiative*

mHealth uses mobile technology to provide medical support to patients and to provide medical support directly to healthcare providers cost-effectively and attractively. The WHO-ITU program aims to support governments deploying mobile components to enhance existing national health activities. The primary purpose of this initiative is to prevent, manage and treat NCDs and their associated risk factors. The purpose is not to create a new independent program, but to work with the government, work with partners, including the private sector, and build existing structures. As a result, mobile projects can be taken over more quickly and become more sustainable in the long run.

The advantages are:

- **Reduction of medical expenses:** all countries in the world, regardless of GDP,

are facing rising health care costs. The global recession continues to push down government spending on health care around the world. Early identification and treatment of illness by focusing on prevention and health promotion can avoid many medical costs.

- **Healthy population:** mobile health provides citizens with the opportunity to intervene in their health care early on and reduce health care costs by leveraging existing technology at a low cost.
- **The takeover of existing mHealth service:** the WHO-ITU program will enable to improve and extend existing solutions in the target countries, increase their impact on improving the health of the population, and potentially transfer the initiative to other countries. It is designed to create mobile health programs based on scientifically validated evidence but is currently lacking in many independently created mHealth tools or apps for the user's health. An example of an intervention that might benefit from this is the NHS smartphone app for checking for symptoms of illness.

### *The Defeat-NCD Partnership*

Established January 2018, the Defeat-NCD Partnership aims to prevent the unnecessary death, as well as the sickness and disability that can result from NCDs. It also targets the economic and social impacts these diseases can have on a community. The partnership is public-private-people in nature. Moreover, it is hosted by the United Nations Institute for Training and Research (UNITAR). The partnership also involves multilateral agencies, various national governments, civil society, as well as the private sector.



This partnership's most immediate target and primary focus is on the closely-related diabetes and hypertension conditions. It aims to target lung conditions and cancer in the years ahead. In terms of its functions, the partnership focuses on four key points:

- **NCD Financing:** It will provide particular focus on providing low-income nations with the necessary aid to achieve universal health coverage.
  - **NCD National capacity building:** It will aid in strengthening local governments through the development of plans of action and focusing on key institutions.
  - **NCD Marketplace:** It will support and expand upon the consistent availability of affordable essential diagnostics, medicines, and technologies targeting NCDs.
  - **NCD Community health scale-up:** It will also increase the provision of NCD services via health system strengthening and community action.
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## Learning Outcomes

- Delegates will learn about the biological effects of non-communicable diseases.
- Delegates will obtain an understanding of the underlying causes of non-communicable diseases, and what factors increasingly trigger them.
- Delegates will explore the social, economic, and environmental dimensions of non-communicable diseases.

## Recommendations

- Delegates are to explore how non-communicable diseases and their treatment are being contained amongst minority and marginalized groups, alongside refugees.
- Delegates must keep up to date with their country's involvement in scientific and technological involvements/updates within the field of treatment and containment.
- Delegates are to reflect on how the situation of handling non-communicable diseases was impacted by the surge of Covid-19.
- Delegates are to explore how the food industry within national scales impacts the fluctuation of NCD-impacted citizens.

- Delegates are to analyze how social and economic status impacts the spread of NCDs within national scales.

## Key Questions

- How do technologies facilitate the spread and impact of NCDs?
- Why are people with NCDs more vulnerable to the health impact of emergencies?

- What are the nutritional intakes/fat consumption amongst the average citizens?
- What are the nation-specific interventions to support countries to reduce tobacco use (if there are any)?
- What is the burden of noncommunicable diseases in the nation?
- What were the environmental actions taken to limit the environmental impact of NCDs?

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## Annexes

### Relevant Institutions

- The United Nations Children’s Fund (UNICEF)
- The World Bank
- Centers for Disease Control and Prevention (CDC)
- CARE International
- Doctors Without Borders / Medecins Sans Frontieres
- Population Services International
- The United Nations Development Program (UNDP)
- The United Nations (UN) Economic and Social Council (ECOSOC)
- International Committee of the Red Cross (ICRC)

### Relevant Legal Treaties, Frameworks, and Conventions

- Constitution of the World Health Organization
- International Sanitary Regulations
- Framework on Tobacco Control
- Minamata Convention on Mercury
- Stockholm Convention on Persistent Organic Pollutants
- Basel Convention on Transboundary Movements of Hazardous Wastes

## Relevant Conferences

- Global Health Summit
- Future Exhibition and Conference
- World Health Care Congress
- Elevate PX
- HCRSC
- ACR Annual Meeting
- Digital Health Summit
- Medtech Conference
- Asia Pacific Global Summit on Healthcare
- National Health Policy Conference
- Health Datapalooza
- Patient Experience Conference
- International Forum on Quality and Safety in Healthcare
- Patient Experience Conference
- AcademyHealth Annual Research Meeting
- Agents of Change Summit

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