Committee: World Health Organization
Issue: Addressing the Health Impacts of Extreme Heat Waves and Air Pollution in South Asia
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Committee Introduction

The World Health Organisation is a specialised United Nations agency to promote international public health. WHO was established in 1948 and is succeeding in making the world healthier, safer, and more productive by setting standards of health, monitoring trends in health, and responding to international health issues. The organisation has a firm stance that human rights and health are an integral part of peace and security.

Prevention and reduction of health emergencies are at the heart of WHO's work. Over the recent past, South Asia has been experiencing increasing risks, caused by intense heat waves and air pollution, both with generalised public health impacts. Both environmental hazards worsen existing health inequality, put pressure on healthcare, and have a concerning effect on vulnerable groups like children, older people, and persons with chronic health conditions. The WHO provides technical support, health systems capacity development assistance, and global solidarity.

Delegates of the WHO who would take part in this session would be member nations who are committed to pushing the world towards global health. The committee would deliberate about how to boost health resilience, create early warning systems, and maximise cross-border action for reducing the impacts of intense heat waves and air pollution in South Asia (see more possible solution ideas in Questions a Resolution Must Answer). By evidence-based policy recommendations and diplomatic negotiation, the committee seeks to prepare plausible solutions in accordance with the WHO's mandate to promote healthy living and wellbeing for every individual, regardless of borders.

Agenda Introduction

Vaccine inequality remains one of the most pressing global health challenges despite the experience of Coronavirus (Covid19). This is particularly a problem witnessed in low-income countries, where millions still lack access to lifesaving vaccines. Despite unprecedented advancements in vaccine development and research, inequalities between high-income and low-income nations in access to vaccines have grown, mirroring long-standing structural inequalities in the global health system.

During the Covid19 pandemic, While over 80% of populations in high-income countries received at least one dose of COVID-19 vaccine as of 2023, approximately 30% of the population of low-income countries received only a single dose. Sub-Saharan Africa remains one of the regions most affected, with vaccination rates in other nations ranging as low as 20%, while the world average has been around 70%. Similarly, in the case of other core vaccines like the measles, polio, or HPV vaccine, coverage remains extremely low in most regions of the Global South.

There are a number of reasons why this gap exists. First, poor nations are limited by finances to purchasing adequate vaccine supplies. According to the World Health Organization (WHO), over 75% of the global vaccine exports represent only 10 nations, and the rest rely on donations or delayed purchase. Intellectual property restrictions and technology constraints further limit local manufacturing capabilities in poor nations.

Logistical and infrastructure deficits also are significant contributors behind unequal vaccine distribution. Rural regions in developing nations often lack reliable cold chain systems, transportation, and healthcare personnel, making last-mile delivery a formidable challenge. The WHO estimates that up to 25% of vaccines are wasted globally, with the majority of these losses occurring in regions lacking robust health infrastructure.

While efforts by mechanisms such as COVAX, co-chaired by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI), and the WHO have worked to provide equitable vaccine distribution, there are still gaps. COVAX aimed to send 2 billion doses by the end of 2021, but by mid-2023 it was below target levels due to limits of shortages of supply, export controls, and uneven global coordination.
Because this is a crisis issue both in response to current challenges as well as an anticipatory one for what is yet to come, collective action at a global level must be commenced. Maintenance of equitable vaccine distribution is not just morally significant but also essential to maintaining world health security and strengthening health systems in developing nations.

Definition of Key Terms

Heat Wave
A prolonged period of excessively high temperatures, often worsened by humidity, that exceeds the average for a region. In South Asia, heat waves threaten public health, causing heatstroke, dehydration, and increased mortality, especially in vulnerable populations.

Air Pollution
Contamination of the atmosphere by harmful substances such as PM2.5, nitrogen dioxide, and

sulfur dioxide. Air pollution is a major health risk in South Asia, contributing to respiratory illnesses, cardiovascular diseases, and premature deaths, especially in urban and industrial areas.

Heat-Related Illnesses
Medical conditions caused by prolonged exposure to extreme heat. Common types include heat exhaustion, heat cramps, and heatstroke, which can be fatal if untreated. These illnesses disproportionately affect the elderly, children, and those working outdoors.

Airborne Particulates
Tiny solid or liquid particles suspended in the air, often released by burning fossil fuels, industrial processes, and wildfires. Fine particles like PM2.5 can enter the lungs and bloodstream, leading to heart and respiratory diseases.

Public Health Emergency
A situation that poses a serious risk to the health of a population, often requiring immediate and large-scale action. Heat waves and poor air quality can overwhelm health systems and cause a surge in mortality and illness.

Urban Vulnerability
The degree to which cities and their populations are exposed to and unable to cope with environmental hazards. Poor housing, limited access to healthcare, and overcrowding increase health risks during extreme heat and pollution events.

Climate-Induced Migration
The movement of people forced to leave their homes due to changes in climate conditions, such as rising temperatures or unlivable air quality. This disrupts social structures and strains infrastructure in already vulnerable regions.

Environmental Inequity
Unequal exposure of communities to environmental hazards due to socio-economic or geographic factors. Low-income groups often live in high-risk areas with poor air quality and limited access to cooling, clean water, and healthcare.

Heat Action Plan
A coordinated set of public health measures designed to reduce the health impact of extreme heat events. This may include early warning systems, public awareness campaigns, cooling shelters, and emergency medical response strategies.

Timeline of Key Events

2013: WHO identified poor air quality as Group 1 carcinogen under the International Agency for Research on Cancer (IARC)'s classification system. Particularly, experts associated with the IARC and WHO elaborated that air pollution significantly increased chances of developing lung cancer and bladder cancer.

2015: In May, 2015, India faced one of the deadliest heat waves it has faced. At least 2,500 deaths were recorded, potentially and likely many more that were not documented. The happening drew global attention onto the worsening trajectory of the impact heat waves had on global health, especially given the progress of climate change.

2016: India launched its first National Action Plan on Climate Change and Human Health (NPCCHH) with the guidance of WHO. The framework pertained to three main focuses that align directly with the agenda: first, addressing the health impacts of air pollution; second, preparing and mitigating the impacts of heat-induced illnesses; and finally, establishing green, climate-resistant healthcare infrastructure.

2018: WHO held its Global Conference on Air Pollution and Health, focusing on South and East Asia. Through this consultation, the global society intended to reduce 7 million deaths caused by air pollution each year by 2030, in connection with the UN Sustainable Development Goals (UN SDG). Ministers of Health and Environment from across the globe, intergovernmental body representatives, and environmental scholars discussed, inter alia: encouragement of the BreathLife 2030 campaign; methods to reinforce air quality monitoring technology at a low budget; and addressing the health of vulnerable groups, especially children and outdoor laborers.

2020: All member states of the Association of Southeast Asian Nations (ASEAN) signed the ASEAN Agreement on Transboundary Haze Pollution (AATHP). As its name suggests, this agreement was established to prevent and mitigate cross-border haze pollution caused by land and forest fires.

2023: In 2023, WHO supported various regional initiatives in South Asia. Through its Ministry of Health and Environment, Sri Lanka, in collaboration with the WHO, initiated discussions on efforts to enhance climate resilience in the health sector's infrastructure and service delivery. Furthermore, the WHO aided ten local hospitals in Bangladesh to launch the Early Warning, Alert & Response System (EWARS) tailored to diseases sensitive to climate change.

2025: In February, the World Health Organization South-East Asia Regional Office (SEARO) launched a Technical Meeting on Climate Change and Health. The summit worked towards

helping member nations build capacity for their health systems to adapt to the impacts of climate change, mobilize climate finance for the health sector, and facilitate regional knowledge sharing. As a result, eight of the ten participating countries confirmed their plans to develop climate resistant health systems.

Positions of Key Member Nations and Bodies

India
India experiences some of the most extreme air pollution and heat stress-related health effects in the South Asian region. India has experienced all-time heat waves with temperatures regularly exceeding 45 degrees Celsius and occasionally about 50 degrees Celsius and above, leading to excessive illness and death, particularly amongst the urban slum residents and outdoor labourers. Despite all these problems, heat waves are still not officially a notified disaster, and working conditions for the susceptible groups are still brutal. Urban heat action plans were implemented in India, assisted by the WHO. These have already saved thousands of lives through improved warning systems and public awareness.

Bangladesh
Bangladesh is also being increasingly affected by heat, along with intense air pollution that is scientifically proven to trap heat, adding health risks. Heat wave warnings began being issued, and government buildings and public spaces were being turned into cool shelters, particularly for women, children, and low-income families. Bangladesh is also trying to include heat waves in its disaster management system and is attempting to receive foreign funds to improve its health and environmental resilience.

Nepal
In the Terai southern plains of Nepal, temperatures consistently exceed 40 degrees Celsius and show a constant high humidity. This leads to increased hospitalisation, further disadvantaging poor populations and those living on a daily wage of labour. Nepal has not experienced much systematic action in the direction of health management, but is gradually increasing early warning systems and community resilience.

Sri Lanka
Sri Lanka is experiencing a steep increase in the number of days with temperatures above 35 degrees Celsius, posing risks to the livelihood and health of outdoor labourers, especially in the northern region. National climate adaptation plans of action have been launched by the government and efforts are being made to mitigate the impact of heat stress and air pollution on health. More investment in cooling infrastructure and public health interventions is necessary.

Pakistan

One of the world's hottest heat waves hit Pakistan, with city centres in urban cities such as Jacobabad hitting up to 52 degrees Celsius, which is well above the survival levels of human beings. Heat adaptation is being integrated into national and local disaster risk reduction, but inequality and limited resources prevent effective intervention, especially for urban poor individuals. Pakistan requires global assistance to increase resilience and protect the vulnerable.

Questions a Resolution Must Answer

1. How can the WHO feasibly fund the solutions proposed, with the US's major funding cut and withdrawal from the organization effective beginning in January 2026?
2. With heat waves and air pollution expected to aggravate over time, what health-related approaches can the WHO take to prevent the health complications arising from such phenomena in the long-term?
3. What specific solutions can be proposed to mitigate the health impacts on the elderly, low-income communities, and outdoor laborers, who are disproportionately impacted by the climate situation?
4. How can South Asian governments effectively and ethically track and monitor the health data of populations affected by heat waves and air pollution?
5. How can regional cooperation among South Asian countries be reinforced to address cross-border air pollution conflicts and encourage data sharing for heat waves?
6. What measures can be taken to improve public awareness and education on the health risks linked to heat waves and poor air quality, along with enhancing community preparedness?
7. What are some solutions that can address the health impacts of the relevant climate phenomena without compromising the economic and industrial growth of the South Asian countries?

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