

# Planetary Health

### What is Planetary Health?

Welcome to the exciting journey of understanding planetary health – a concept that focuses on how environmental changes affect human health. Planetary health involves caring for our planet and all its inhabitants. It's about ensuring healthy air, water, and land for generations to come, as our own well-being is intertwined with that of the Earth. By nurturing a sustainable environment, we not only protect the health of present and future generations but also preserve the rich diversity of life on our planet.

### Connecting Everything Together

Planetary health teaches us that everything is connected – the air, oceans, forests, animals, and humans. It investigates and seeks solutions for various interconnected issues such as climate change, natural disasters, water scarcity, changing food systems, urbanization, shifts in biodiversity, deforestation, pollution, diseases, and mental health. Understanding and addressing these topics are crucial for a sustainable and healthier world.

### Why Does Planetary Health Matter?

We only have one Earth. It's our home, and we want it to flourish now and for future generations. When we take care of the planet, we are also caring for ourselves. Clean air, fresh water, and a thriving environment contribute to our well-being. By looking out for the Earth, we're safeguarding the well-being of all life forms.

### The Path Forward: Preserving Our Planet

Planetary health emphasizes our interconnectedness and the significance of our choices. When we make decisions that benefit the Earth, we're creating a healthier and happier home for everyone. It's crucial to maintain a balance between all aspects of the environment to ensure a sustainable future. Let's embark on this journey together, exploring and learning how to be the best guardians of our incredible planet, navigating the path forward hand in hand.

## Planetary Health Topics

### Climate Change

Climate change is the long-term alteration of Earth's weather patterns. Our planet is getting warmer, primarily due to human activities like burning fossil fuels, which release greenhouse gases into the atmosphere and cause temperatures to rise. Since the start of the Industrial Revolution in the late 1700s, the average temperature has increased by about 1.2 degrees Celsius. This rise in temperature is leading to major impacts, including unusually hot summers, heavy rainfalls, and droughts, as our climate becomes increasingly unstable.



Download "Climate Change" Teaching Guide

### Natural Disasters

Natural disasters are powerful forces unleashed by nature, such as hurricanes, earthquakes, and floods. Every year, about 100 million people worldwide are impacted by these sudden and intense events, which can wreak havoc on communities. Climate change is exacerbating these natural disasters, making them more frequent and severe. When natural disasters occur, individuals are forced to evacuate, facing greater risks of sustaining injuries or becoming ill, and must deal with the aftermath of having their homes destroyed.



Download "Natural Disasters" Teaching Guide

## Planetary Health Topics

### Water Scarcity

Water scarcity occurs when there's an insufficient supply of clean water to meet people's needs. Currently, 2.2 billion people—almost 1 out of every 3 individuals on Earth—lack access to safe drinking water. This shortage of water makes it challenging for people to maintain their health, cultivate food, and carry out everyday tasks such as cooking and cleaning. Additionally, water scarcity affects vulnerable communities to a greater extent, worsening inequalities in many regions of the world.



Download "Water Scarcity" Teaching Guide

### Changing Food Systems and Nutrition

Changing food systems means that the way we grow food and the nutritional quality of our food are shifting. Unfortunately, not everyone has enough food, and for those who do, it might not provide the proper nutrients to keep them healthy. Approximately 820 million people experience hunger due to a lack of access to food or because their diet lacks essential nutrients. Insufficient nutritious food can cause malnutrition, which impacts children's growth and learning abilities, as well as the health and well-being of adults.



Download "Changing Food Systems and Nutrition" Teaching Guide

## Planetary Health Topics

### Urbanization

Urbanization refers to the process of cities expanding as more and more people move from rural areas to urban centers. In fact, more than half of the world's population now resides in cities! This significant shift influences different aspects of our lives, including transportation services, infrastructure, and access to resources. Additionally, urbanization leads to changes in housing, job opportunities, and cultural dynamics within urban areas.



Download "Urbanization" Teaching Guide

### Biodiversity Shifts

Biodiversity, the variety of living things on Earth, is crucial for keeping our planet's ecosystems healthy and balanced. Unfortunately, in the last 40 years, Earth has lost around 60% of its wildlife population. This decline not only endangers many species but also disrupts the important relationships between different plants and animals that are necessary for keeping ecosystems strong and healthy. Additionally, this loss of biodiversity affects people's health. Studies show that as biodiversity decreases, the risk of diseases like malaria and Lyme disease spreading increases, posing significant public health risks.



Download "Biodiversity Shifts" Teaching Guide



## Planetary Health Topics

### Pollution

Pollution involves contaminating the air, water, and soil with harmful substances, which can have devastating impacts on both human health and the environment. Alarmingly, more than 9 million people die prematurely each year due to pollution-related causes. Pollution not only contributes to respiratory diseases, cardiovascular problems, and cancers in humans but also harms wildlife, disrupts ecosystems, and degrades natural habitats.



Download "Pollution" Teaching Guide

### Deforestation

Deforestation, the cutting down of large areas of forests, occurs at an alarming rate – about 10 million hectares vanish each year! This destruction affects climate, wildlife, and the balance of nature. Trees, the "lungs of the earth," regulate climate by absorbing carbon dioxide and releasing oxygen. As a result, deforestation disrupts this vital process, contributing to climate change, biodiversity loss, and water quality.



Download "Deforestation" Teaching Guide

### Mental Health

Mental health encompasses our thoughts, emotions, and coping strategies. In response to life's challenges, it is estimated that 1 in 5 people worldwide experience mental health issues at some point in their lives. Mental health problems can significantly impact individuals' quality of life, affecting their relationships, work or school performance, and overall well-being. Additionally, if left untreated, mental health issues can lead to serious consequences, including increased risk of substance abuse, homelessness, and suicide.



Download "Mental Health" Teaching Guide

### Infectious and Noncommunicable Diseases

Infectious diseases are illnesses caused by microscopic, harmful germs that can spread from one person to another through various means, such as physical contact, airborne transmission, or contaminated surfaces. On the other hand, noncommunicable diseases, such as heart problems and diabetes, are not contagious but arise due to factors like dietary choices, sedentary lifestyles, and genetic predispositions. Shockingly, noncommunicable diseases account for over 70% of all global deaths, showing the major impact of lifestyle-related health problems on public health worldwide.



Download "Infectious and Noncommunicable Diseases" Teaching Guide



© Planetary Health Alliance 2024

The PHA is dedicated to supporting these educational endeavors, bringing together students and educators from around the world to share resources and collaborate on initiatives that bridge knowledge with action. Through unwavering support and collaboration, the PHA aims to equip individuals and institutions with the necessary tools to confront the interconnected challenges facing planetary health. Join us as we work towards creating a healthier world for all life by exploring the PHA at: [www.planetaryhealthalliance.org](http://www.planetaryhealthalliance.org).

Created by: Jennifer Rasmussen, PHA Education Fellow

The Planetary Health Alliance is a growing consortium of over 400 universities, non-governmental organizations, research institutes, and government entities from 60+ countries worldwide committed to understanding and addressing the impacts of global environmental change on human health and well-being.

## About



