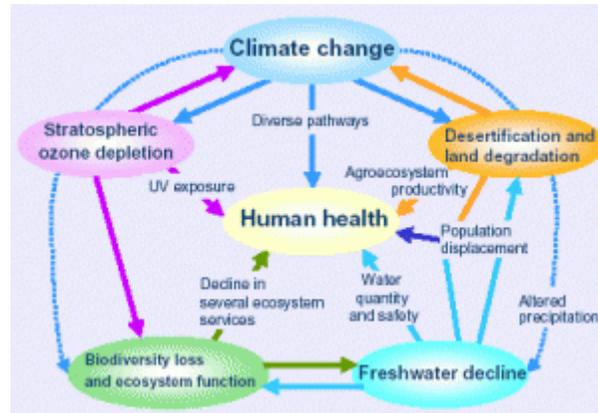


## DEGRADATION OF GLOBAL ENVIRONMENT AFFECTS HUMAN HEALTH TO A LARGE EXTENT



Introduction - The problems resulting from environmental change and its degradation, pose new challenges for traditional public health science. It is an accepted fact that, environmental degradation is contributing to human health threats worldwide. We may have several questions in our mind.

a. How much does the environment affect human health?

b. Are air pollution and tainted water shortening our lives and those of our children?

These questions have aroused increasing interest in recent years. In the poorest regions of the world an estimated one in five children will not live to see their fifth birthday, primarily because of environment-related diseases. This tragedy translates into more than 11 million childhood deaths a year worldwide, mostly due to malaria, acute respiratory infections or diarrhea, all illnesses that are largely preventable.

\* Why environmental health? Environmental degradation is an important factor contributing to the burden of disease. 19%–25% of the burden of disease in developing world is linked to environmental factors. The annual cost of damage to health and quality of life due to environmental degradation; is estimated to be 1.8%–3.4% of gross domestic product in some countries. 43% of the children's (0-14 years) mortality is attributable to poor environmental conditions.

\* Thus, environmental degradation exerts significant pressure on human health. Exposure to air, water and soil pollution, to chemicals in the environment, or to noise, can cause cancer, respiratory, cardiovascular and communicable diseases, as well as poisoning and neuro-psychiatric disorders.

\* Air pollution, in fact, is one obvious environmental health threat in many countries, contributing to a number of illnesses, such as asthma and in some cases leading to premature death. Of particular concern is the fact that children are more vulnerable to air pollution than adults, and increased rates of infant mortality have been recorded in highly polluted areas. Concerns about the impact of air pollution on health and the economy have resulted in measures to mitigate emissions of the most harmful pollutants, such as particle pollution (acids, organic chemicals, metals, and soil or dust particles) and ozone, which affects the respiratory system. Despite national and international interventions and decreases in major pollutant emissions, the health impacts of air pollution are not likely to decrease in the years ahead, unless appropriate action is taken.

\* Fossil fuels give us more than just climate change. Burning fossil fuels contributes to other air pollution problems like acid rain and smog that also damage forests, lakes and agricultural crops. The biggest impact from these pollutants, however, may be on human health. Emissions from burning energy include tiny particles that we breathe deep into our lungs. Once there, these pollutants cause respiratory problems like asthma and bronchitis, and cardiac problems. If these particles carry toxics like benzene, furans or dioxins, they can eventually cause cancer.

\* Water is another key environmental health issue – unsafe drinking water and untreated waste water kill thousands of people a year, most of them children. Other health issues associated with emerging environmental hazards, such as chemical products, will also need to be addressed. Chemical products are used in virtually every man-made product and play an important role in the everyday life of people around the world. However, harmful exposure to chemical products can lead to health problems such as skin diseases, chronic bronchitis, nervous system dysfunctions and cancers as well as damaging the environment.

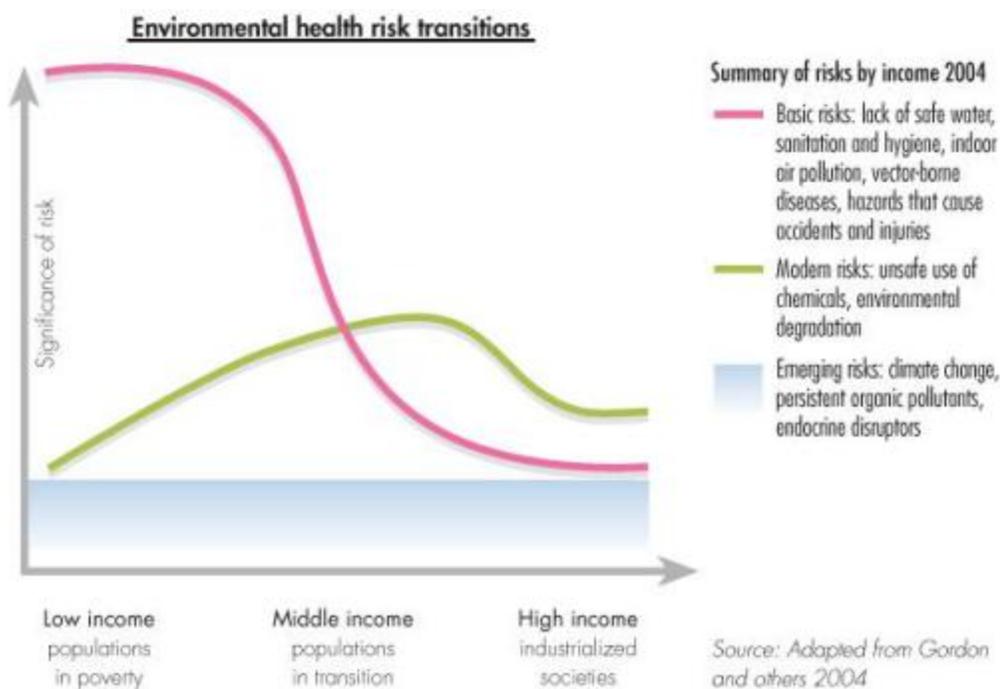
\* Deforestation, agricultural uses of land, climate change caused by increased carbon dioxide emissions, and pollution have led to create unsafe and unhygienic conditions that increase disease spread. Deforestation forces changes in watershed and local climate.

\* Environmental degradation has shown an increasing relationship with the rise and spread of human diseases. Genes evolved and became more susceptible to disease to the environmental impacts. The World Health Organization believes that almost one third of global disease can be directly related to environmental risk factors. Antibodies and immune systems have developed in part as a result of environmental change. In fact, environmental change plays a large role in the emergence of infectious disease. In particular, as the human population continues to grow, the population density increases; this leads to an abundance of parasites and infection-forming conditions. Extreme temperatures, climate-related disturbances, and air and water pollution have a direct influence on the spread of infection and disease. Environmental exposures to chemicals and toxins are a major contributor to disease.

\* Many of the environmental conditions that impact health are avoidable. Therefore, prevention of health problems through environmental management, rather than simply treating diseases and ailments after they have occurred, is the salient message of environment and health section of various UN charter and various NGOs. These messages offer governments, development agencies, policy-making groups, private businesses, communities and individuals worldwide strategies to slow or even halt further environmental deterioration, averting significant ecological disruption and its possible accompanying economic impacts.

\* Improvements must be made in environmental protection. Education is a key process in bettering the conditions. Monitoring of climatic changes help to anticipate outbreaks, as well as changing habits, such as drainage of swamps, screening of houses, and improvements in sanitation and nutrition. Improvement of air quality, water supplies and sanitation, education of the medical community and general public, support of vaccination research, and coordinated restrictions of the use of antibiotics and pesticides would lead to mitigate the problems.

\* Focused investments in education, healthy work conditions, environmental sanitation, and a safe water supply are extremely effective in improving health and well being, as well as in increasing productivity and economic growth. Strengthening dialogue between the environment and health sectors at national and local levels required to enhance the quality of health system.



Conclusion - We all are affected by environmental degradation, but it is the poor – especially women and children – who bear the main burden.

The health effects of global change are often indirect and difficult to assess, and quality of evidence for the health-related outcomes varies widely. Furthermore, the health science necessary to understand global environmental change is increasingly interdisciplinary and requires collaboration among meteorologists, chemists, biologists, agronomists and health scientists.

Environmental degradation exaggerates the imbalance between population and resources, and worsens the severity of poverty. In other words, interaction between poverty, population growth and environmental degradation impede sustainable economic development and worsen population health. It is important for health scientists to anticipate the potential consequence of environmental change and act accordingly. It is irony that, serious environmental problem are often unknown or unrecognized. For example, at the time of first major international conference on environment in Stockholm (1972) global warming, acid rain and tropical deforestation were not recognized as major potential problems and no work for prevention of environmental degradation carried out early.

\* Future challenges -

- Severe water scarcity
- Water supply and basic sanitary measures in some countries
- Devastating impacts of disasters
- Air and water pollution and toxic chemical hazards
- Need for environmental health norms, standards and guidelines
- Emerging priorities: climate change, marine pollution
- Need for institutional and legislative framework for environmental services and protection
- Protecting environment without harming economic growth

Source : <http://saferenvironment.wordpress.com/2009/04/21/degradation-of-global-environment-affects-human-health-to-a-large-extent/>