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Message by Dr Gro Harlem Brundtland Director-General, WHO



The biggest threats to children's health lurk in the very places that should be safest—home, school and community. Every year over 5 million children ages 0 to 14 die, mainly in the developing world, from diseases related to their environments—the places where they live, learn and play. These diseases include diarrhoea, malaria as well as other vector-borne diseases, acute respiratory infections and unintentional injuries (accidents).

These deaths can be prevented. We know what to do. Strategies have been developed to combat these threats to children's health. They need to be implemented on a global and national scale. So this year's World Health Day is dedicated to ensuring Healthy Environments for Children.

We all need to do more to tackle environmental risks to children's health. As you will see in this brochure, the burden of disease from environment-related diseases is great and falls disproportionately on children. In September 2002, WHO launched the Healthy Environments for Children Initiative. We are now working with different groups around the world to turn this initiative into a vibrant, global alliance which will be capable of mobilizing local support and intervening to make children's lives healthier where they live, learn and play.

By working together on many fronts, by building on existing programmes, and by adapting concrete actions to local needs, members of the alliance can make a difference. Together, we are better able to confront the environmental health issues faced by communities, countries, regions and sectors all around the world.

Every child has the right to grow up in a healthy home, school and community. The future development of our children—and of their world—depends on their enjoying good health now.

Message by Dr Hussein A. Gezairy WHO Regional Director for the Eastern Mediterranean



Children are our future. However, their health is threatened by a variety of causes, among which environmental agents play a major role. Environmental risk factors often act in concert, and their effects are exacerbated by adverse social and economic conditions, particularly poverty. Natural disasters and war, occupation and civil unrest bring additional hazards. In particular, children affected by war and conflict suffer both physically and emotionally. This has tremendous consequences for their psychosocial development and subsequently for national health and economic development. Furthermore, young children have no choice about the factors to which they are exposed and are especially susceptible to environmental conditions.

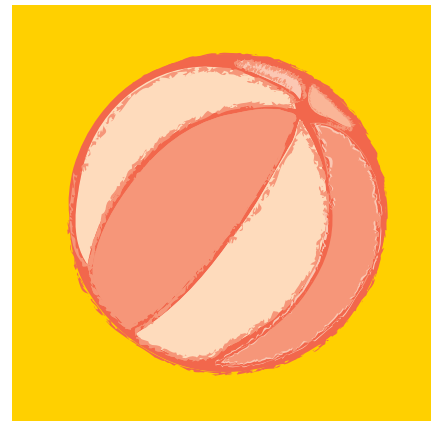
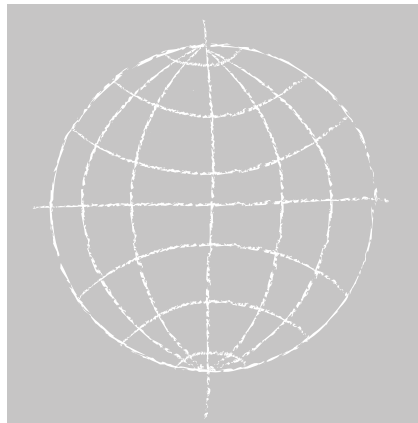
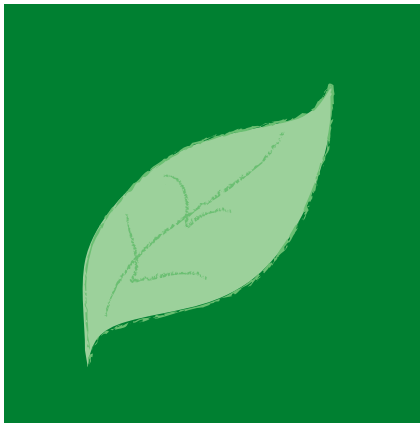
Children constitute about 50% of the population in our Region, where there is an increasing concern about the effects on children's health of the deterioration and contamination of the environment in the settings where children live, learn, play and sometimes work. In fact, respiratory infections, diarrhoeal diseases, injuries and malaria, all of which are directly related to environmental conditions, account for more than 43% of the mortality of children under the age of 5 in our Region. The Regional Office has already "put children first" by giving children's health high priority and adopting an integrated strategy to achieve healthy lives for our children, the Integrated Management of Child Health.

Experience to date has made it clear that the full participation of the community in finding and implementing appropriate solutions for health and environment is always an important prerequisite for success. Children themselves are dynamic and powerful forces for environmental protection; they show an innate interest in nature and are often passionate about the preservation of their planet. With proper support, children can acquire useful knowledge from participating in environmental activities and can contribute in a unique manner, with energy and vision, to finding solutions.

INTRODUCTION



And God has given you mates of your own kind, and has given you, through your mates, children and grandchildren, and provided you with good things: will they then believe in falsehood, and deny God's favours? (Quran 16:72)





The 1992 Earth Summit made it clear that development is about meeting the needs of people, their health, their education, their well-being, and the environment on which they depend. Children are our future. Their world centres on the home, school and the local community, all of which should be healthy places where children can thrive, protected from disease. In reality, however, these places are often so unhealthy that they are responsible for the majority of deaths and a huge burden of disease among children in the developing world. More than 5 million children under 15 years old die every year from diseases linked to the environments in which they live, learn and play...their homes, schools and communities.

Degraded environments are the breeding ground for germs, parasites and disease-bearing insects. Half a billion children worldwide are debilitated by diseases such as malaria, schistosomiasis, dengue fever and cholera.

Many environmental threats to children's health are aggravated by persistent poverty, conflicts, natural and man-made disasters, and social inequity. The children worst affected are those in the developing world, but there are many children in more industrialized countries, even the richest countries, who are also at risk.

Children have a unique susceptibility to environmental conditions for a variety of reasons.

- They have higher rates of respiration and calorie consumption per kilogram of body weight than adults.
- Their immune, reproductive, digestive and nervous systems are still developing. The immune system is particularly vulnerable early in life to damage from exposure to certain contaminants that have been associated with developmental disabilities.
- Their hand-to-mouth behaviour, size and play habits, especially when they are toddlers, increase their exposure via inhalation and ingestion to toxicants in dust, soil and carpets, such as certain pesticide vapours and lead. Their natural curiosity and lack of knowledge are aggravating factors.
- Adolescents often experiment with risk-taking behaviours such as tobacco smoking.

Some environmental diseases result in long-term disability; others cause more immediate and short-term effects. Some may result in conditions such as blindness, crippling diseases and mental retardation. Moreover, children who are chronically sick or disabled cannot attend school regularly, and so their social and intellectual development also suffers. In turn, this huge burden of ill-health among children constrains the social and economic development of their countries. Children with chronic disease and long-term disability will not grow up to be healthy and productive.



Currently, the economic burden of environment-related disease is enormous.

■ Africa's gross domestic product would probably be about US\$ 100 billion higher if malaria had been tackled successfully 30 years ago.

■ There is evidence that exposure to toxic substances may cost developed countries more than US\$ 300 billion per year. In the United States alone, the annual costs of certain childhood environmental diseases are estimated to be US\$ 55 billion.

When environmental risks are reduced, the financial gains are considerable. Research suggests that Mexico City would benefit by perhaps as much as US\$ 2 billion a year if officials reduced the particulate matter in the air by just 10%. In the United States, children are already benefiting from policies requiring lead-free gasoline that have reduced exposure to lead. According to one report, for each year's cohort of children, the economic benefits of lead-free gasoline are estimated to be between US\$ 110 and US\$ 319 billion.

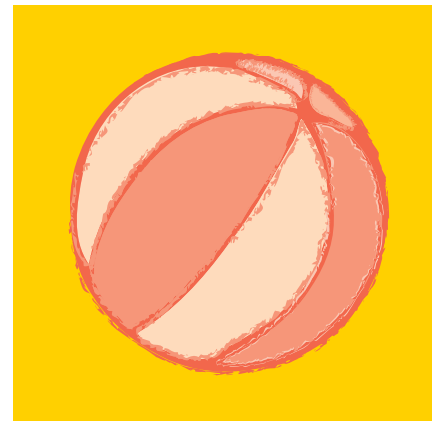
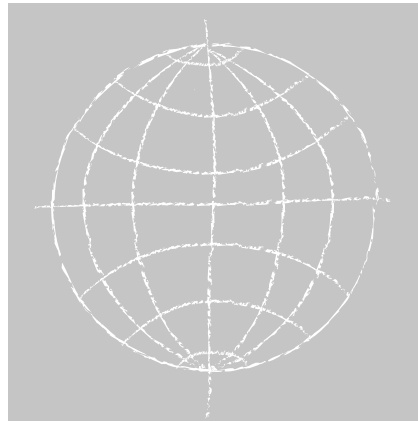
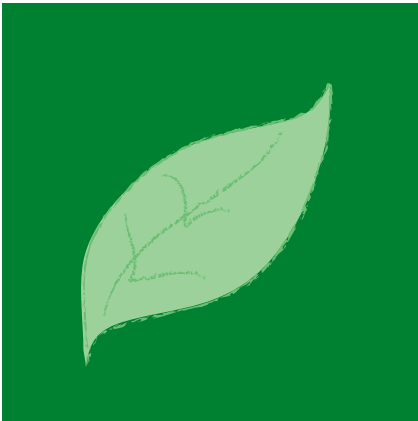
The suffering of children because of environmental hazards is not inevitable. There are solutions; most of the environment-related diseases and deaths can be prevented. Never before has there been such a range of tools and strategies to protect children from the dangers lurking in their environments.





WHAT ARE THE ENVIRONMENTAL RISKS TO CHILDREN?

And when your Lord said to the angels: "Verily, I am going to place a viceroy on earth." They said: "Will You place therein those who will make mischief therein and shed blood, while we glorify You with praises and thanks and sanctify You." He said: "I know that which you do not know." (Quran 2:30)



Environmental quality is crucial to human health in two ways: unsafe environments adversely affect health; and safe environments actively support and enable good health.

For many children, their personal world is often small, limited to their home, school, the street outside, play areas, and the homes of their extended family. Though limited, this small world can also put children, from an early age, at risk from environmental dangers. Moreover, these risks are increasing.

Generations of children have suffered from certain 'basic' risks existing in their environments. These are unsafe drinking-water, inadequate sanitation, indoor air pollution, insufficient food hygiene, poor housing and inadequate waste disposal. Added to these are today's 'modern' risks, which result from the unsafe use of dangerous chemicals, inadequate disposal of toxic waste and other environmental hazards, noise and industrial pollution. Unsafe chemicals in toys and household products may also harm children.

'Emerging' potential environmental threats to health include global climate change, ozone depletion and other hazards, and emerging diseases. Children are often exposed to more than one risk factor at a time. They frequently live in unsafe and crowded settlements, in underserved rural areas or in slums on the edges of cities which lack access to basic services such as water and sanitation, electricity, or health care. They are likely to be exposed to industrial and vehicle pollution as well as to indoor air pollution and to unsafe chemicals. Children are also likely to suffer from unintentional injuries (accidents) and poisoning associated with unsafe housing and consumer products. They are also more likely than adults to be undernourished, putting them at vulnerability to environmental threats.

A T H O M E

Many children are born at home, and spend a major part of their young lives there. From conception, their health may be adversely affected by hazards in the home such as lack of sufficient water, indoor air pollution, inadequate hygiene, contaminated food and water.



A T S C H O O L

The school, which comprises the building itself, its furnishings and the site on which it is located, shares many of the same health risks as the home—as well as others specific to its setting.



Community school in the Syrian Arab Republic

I am Adel. I am Syrian and 9 years old. I live in Maysaloun village on a mountain in Lattakia governorate. I attend the 4th primary class, with 18 other children. Every day I walk to my school enjoying the greenery and fresh air of my beautiful small village.

We are learning about the respiratory system this year. Our teacher came to the class and showed us a picture of lungs and other parts of respiratory system and explained to us the functions and importance of each part to our life. Then he asked us to observe good and bad practices related to the respiratory system at home and in the community. We visited the grocery, butcher, bakery, and supermarket. We also watched garbage collectors.

My Lord! How can old, wise people be doing such harmful things to our health? They always accuse us of doing bad things.

- Amm Hayder, the butcher, is smoking and makes all the people in his shop cough.
- Amma Boussayna was coughing and sneezing in the grocery shop without covering her mouth or nose.
- Amm Hosni, the baker, smokes the shisha pipe all the time and shares it with his friends with the same mouthpiece.
- Garbage collectors burn garbage in the middle of our village!

We went back to school and discussed our observations with the community to find out how we can protect our village. We are very proud to be helping to teach “old people” how to make a healthier environment for their children and themselves as well.

IN THE COMMUNITY

A child's community may include a number of places, playgrounds, gardens, fields, ponds, rivers or waste dumps, but their relative importance depends on a child's way of life. For instance, millions of children throughout the world live on the street and are vulnerable to myriad hazards including violence and unintentional injury as well as environmental health risks such as infection from scavenging on waste dumps. Many children work from a young age so they are exposed to the same environmental risks in the workplace as adults. However, they are more susceptible to their effects, generally less aware of the risks and even more powerless to tackle them.

A number of countries in the Region suffer from prolonged war, occupation and civil unrest. This has created large refugee populations, the majority of whom are children and women living in stressful settings. Tragedies witnessed in Afghanistan, Iraq, Palestine, Somalia and south Sudan severely affect daily life in their communities, especially among children. Moreover, they aggravate all existing environmental health hazards and have a profound impact on their relative priority.

A day with Nadia: a schoolgirl in Ramallah

My name is Nadia. I am eleven years old. I live with my father, mother and my younger sister at a house in Ramallah. Our house faces the main road. There is a park outside our house, where I used to go and play with my friends. My brother Youssuf was killed in the park three months ago while playing football; he was fourteen. Since then my father has sealed the windows and we do not go the park anymore. Some soldiers now stay at the park. I miss Youssuf very much and cry for him. I see my mother look at Youssuf's picture and cry silently.

One night I heard my parents saying that they are not sure if next morning we will be still alive. Since then, I can hardly sleep and I am really scared waiting for the bombardment of our house at any time.

My father used to have a job working at the big olive farm. He lost his job a year ago. He doesn't have a permit to work anywhere else. He tells us that all jobs at the farm have been given to foreigners. My friend Hoda's father and uncle also do not have jobs. My father now sits in his room all day, often in darkness. From time to time I hear him talk to himself.

Our school closed two months ago. One day a helicopter came and dropped bombs on the school. All the classrooms on the second floor were destroyed and our senior teacher, Madame Susannah, was killed when the roof came crashing down. We cried for her, I loved Madame Susannah very much. Then our teacher Miss Hala told us to meet at the lane between our houses and we had our classes there; we sat on the ground, all around heaps of rubbish are accumulating. One day some soldiers came and chased us away. Miss Hapa told the soldiers that this class was for young girls, but the soldiers didn't listen. I miss my school and my friends; I don't want to sit at home.

I see my mother go to the market everyday to buy food. Sometimes she goes for long hours. She tells us that she has to walk very far to find a shop selling food and vegetables. Many shops have closed because the supply trucks cannot come to deliver the vegetables and other food items; the soldiers check all the trucks and cars bringing food and vegetables. We don't have food every day.



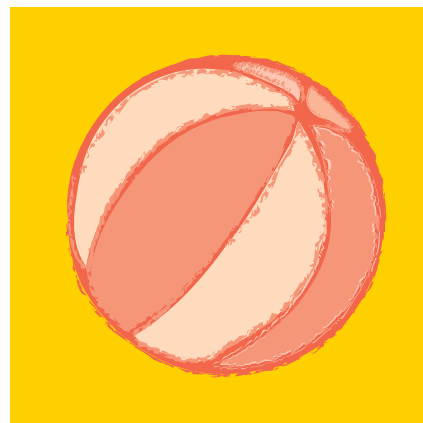
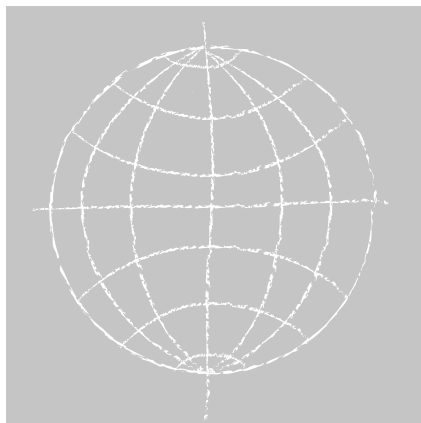
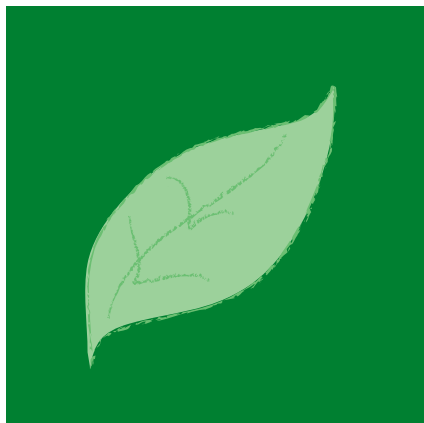


Source : UNRWA

PRIORITIES FOR CREATING HEALTHY PLACES FOR CHILDREN



And do good as Allah has been good to you, and seek not mischief in the land. Verily, Allah likes not the corrupters. (Quran 28:77)



The risks to children in their everyday environments are numerous. But there are six groups of environmental health hazards that must be tackled as priority issues: lack of household water security; lack of hygiene and poor sanitation; air pollution; vector-borne diseases; chemical hazards; and unintentional injuries (accidents). These risks exacerbate the effects of economic underdevelopment and cause the bulk of environment-related death and disease among children.

Peace, security, stability, emergency preparedness and economic development are key to overcoming most of these priority risks. While experience shows that these risks can be significantly reduced even in developing economies, experience also shows that, in higher income societies, the overall burden of environmental diseases in children decreases at the same time as the relative priorities change.



1. Household water security

Household water security covers the reliable availability of safe water in the home for all domestic purposes. Access to a reliable safe water supply is a human right as defined in the General Comment on the Right to Water and the Declaration on the Rights of the Child. If access to safe water is reliably assured, it contributes greatly to health, enabling and encouraging hygiene through key actions such as hand-washing, food hygiene, laundry and general household hygiene. When household water security is endangered, contaminated water may transmit disease and lack of water may prevent minimum hygiene practices to protect health.

Many of the diseases prevented through use of water in hygiene are the same as those that can be transmitted by water when contaminated. The most important of these is diarrhoea, the second biggest child-killer in the world.

Diarrhoea is estimated to cause 1.3 million child deaths per year, about 12% of total deaths of children under 5 years of age in developing countries. Other infectious diseases with similar patterns of transmission include hepatitis A and E, dysentery, cholera and typhoid fever. Lack of household water security is also associated with skin and eye infections including trachoma, and with schistosomiasis. Many chemicals that have the potential to harm people's health can be found in drinking-water. For example, an excess of fluoride is associated with crippling skeletal fluorosis. In countries where high levels of arsenic are found in drinking water, the symptoms of arsenicosis are sometimes seen among young children.

In 2000, WHO and UNICEF estimated that 1.1 billion people lacked access to an improved water source; of these, about 139 million live in our Region.

2. Hygiene and sanitation

The safe disposal of human faeces, including those of children, is a prerequisite for protecting health. In the absence of basic sanitation, a number of major diseases are transmitted through faecal pollution of the household and community environment. These include diarrhoea, schistosomiasis, hepatitis A and E, dysentery, cholera and typhoid fever. Lack of sanitation is also associated with helminth infection and with trachoma. Trachoma causes irreversible blindness; currently about 6 million people worldwide suffer visually impairment from this disease.

About 188 million people in our Region do not have access to any type of improved sanitation facilities. Globally, 2.4 billion people, most of them living in peri-urban or rural areas in developing countries, are in the same situation. Coverage estimates for 1990 and 2000 show that little progress was made during this period in improving this situation.



Even if good sanitation facilities are available, they are not always enough to improve people's health. Personal hygiene is an important preventive measure against the spread of many infections like scabies, particularly in crowded conditions. Children and adults must be encouraged to wash their hands with soap or ash before meals and after using the toilet. It is estimated that in our Region, 270 000 people died in 2000 from unsafe water, sanitation and hygiene (*The World Health Report 2002*).

3. Air pollution

Air pollution is a major health threat to children and a risk factor for both acute and chronic respiratory disease, as well as other diseases. Around 2 million children under 5 years of age die every year from acute respiratory infections. Many are aggravated by environmental hazards. It is estimated that 59 000 people died in our Region in 2000 from exposure to outdoor air pollution.

Indoor air pollution is a major factor associated with acute respiratory infection in both rural and urban areas of developing countries. A pollutant released indoors is often more dangerous to a child's lungs than a pollutant released outdoors. One important concern in developing countries is the exposure to combustion products from biomass fuel and coal, plus reduced ventilation in homes and other places. In the industrialized world, poor indoor environments are characterized by reduced ventilation, high moisture, the presence of biological agents such as moulds, and a range of chemicals in furnishing and construction materials. It is estimated that 118 000 people died in our Region in 2000 from exposure to indoor smoke from solid fuel. Outdoor air pollution, mainly from traffic and industrial processes, remains a serious problem in cities throughout the world, particularly in the ever-expanding megacities of developing countries. It is estimated that a quarter of the world's population is exposed to unhealthy concentrations of air pollutants such as particulate matter, sulfur dioxide, and other chemicals.

4. Disease vectors

In principle, all vector-borne diseases are a serious threat to children's health. However, some pose a specific threat to children because a child's immune system is unable to cope with the assault by the infectious agent, or because the way a child behaves may increase vulnerability to disease. These diseases include the following.

Malaria, which is transmitted by the mosquito, overwhelmingly kills children. Ninety per cent of the burden of malaria is concentrated in sub-Saharan Africa, with over a million deaths a year, mainly among children under 5 years of age.

Lymphatic filariasis, an infection of parasitic worms lodging in the lymphatic system can cause deformities typical (lymphedema and hydrocoele) in children as young as age 12. The decrease in healthy life years caused by this disease is second only in its magnitude to malaria.

Schistosomiasis, a disease caused by blood flukes (worms that live in the bloodstream) and transmitted by water-borne vectors, affects children and adolescents. Chronic infection leads to debilitation and degenerative disease. Two hundred million people are infected around the world.

Leishmaniasis, a parasitic disease transmitted by sandflies, manifests itself either in skin lesions or in damage to internal organs. The latter form is life-threatening, causing an estimated 59 000 deaths worldwide in 2001. Every year an estimated 2 million cases of cutaneous leishmaniasis occur, and an estimated 95% of patients are children under 5 years old.

Dengue fever also affects young children disproportionately in high burden countries. The disease's most lethal form, dengue haemorrhagic fever, kills over 10 000 children each year on average. During major outbreaks, children's hospitals can come to a grinding halt as wards are overwhelmed by admissions.



5. Chemical hazards

As a result of the increased production and use of chemicals, many chemical hazards are present in children's homes, schools, playgrounds and communities. Chemical pollutants are released into the environment by unregulated industries or are emitted from heavy traffic or toxic waste sites. About 50 000 children under 15 years of age die every year as a result of unintentional poisoning.

Pesticides unsafely used, stored and disposed of may harm children and their environment. Household cleaners, kerosene, solvents, pharmaceuticals and other chemical products become dangerous if they are kept in inappropriate containers and in places that are accessible to children. Small children are "natural explorers" and may ingest dangerous chemical products and suffer acute poisoning. The result can be life-threatening.



6. Unintentional injuries (accidents)

Unintentional injuries include road traffic injuries, poisoning, falls, burns and drowning. In 2001, an estimated 685 000 children under the age of 15 years were killed by such injuries. Approximately 20% of all deaths from unintentional injuries worldwide occur in children under 15 years old, and such injuries are among the ten leading causes of death for this age group. Worldwide, the leading causes of death from unintentional injury among children are road traffic injuries (21%) and drowning (19%). Unintentional injuries among children are a global problem. The vast majority of unintentional injuries among children occurs in low and middle-income countries.

Chronic exposure to various pollutants in the environment is linked to damage to the nervous and immune systems, and to effects on reproductive function and on development. This is because exposure occurs during periods of special susceptibility in the growing child or adolescent. For example, children are very vulnerable to the neurotoxic effects of lead in paint and air, which may reduce their intelligence quotient (IQ) and cause learning disabilities. It is estimated that 25 000 people died in our Region in 2000 from exposure to lead. Children are also vulnerable to the developmental effects of mercury released into the environment or present as a food contaminant. Most exposures to toxic chemicals and pollutants are preventable. A number of tools and mechanisms are available to help identify chemical hazards, create safer environments and prevent children's exposure.

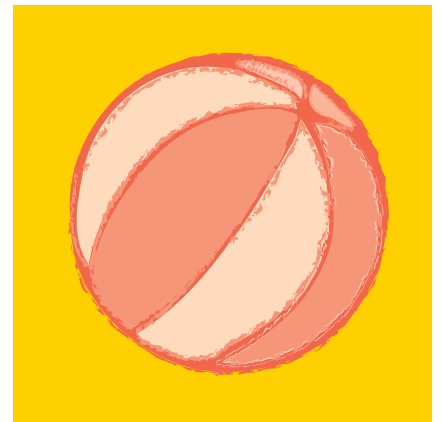
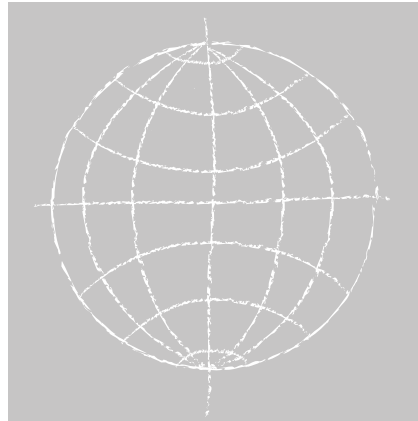
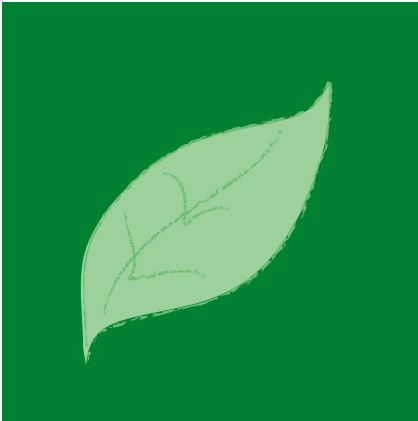


SOLUTIONS



And follow not the command of the extravagant, who spread corruption on earth and reform not. (Quran 26:151–152)

The Prophet, peace be upon him, used to wash his hands before eating. (Narrated by Al Nasa'i following Aisha)



There are many solutions for environmental health problems. A range of effective interventions exists in the areas of policy, education, awareness-raising, technology development and behavioural change. Such interventions can be extremely cost-effective and are to be implemented by a range of stakeholders such as policy-makers and decision-makers, householders, communities and educators. In the boxes that follow are examples of actions that can be taken; the lists are not exhaustive but illustrate a range of actions that can be considered. Of course, the specific interventions that are implemented in any one setting will depend on the nature and severity of the problem, the local context, the resources available and the priorities to be addressed.

1 Examples of effective actions to protect children from risks from water

- ✓ *Extending access to improved water sources among the 'unserved' in rural and urban areas.*
- ✓ *Targeting hygiene education for key behaviours for both children and adults.*
- ✓ *Promoting safe water storage at home and treatment of water in the home when its quality is in doubt, practices which reduce water contamination and lead to proven health benefits.*
- ✓ *Ensuring reliable safe water supply in schools, which has a direct impact on health and provides a model intervention serving as an educational contribution.*
- ✓ *Protecting all water resources from contamination (i.e. not only sources of drinking-water but also, for example, water used for bathing and fishing).*

- ✓ *Encouraging water conservation and avoidance of water wastage. This will spare water for other users and reduce cost of water supply systems*
- ✓ *Implementing targeted measures in areas affected by hazardous chemicals in drinking-water such as lead, fluoride and arsenic.*



2 Examples of effective actions for improved hygiene and sanitation

- ✓ *Ensuring that children have access to safe sanitary facilities and that children's faeces are safely disposed of.*
- ✓ *Providing adequate and separate latrines for boys and girls in schools, which can encourage latrine use and thus reduce disease transmission.*
- ✓ *Ensuring proper waste management and relocation of waste dumps away from human settlements protect children from scavenging and from exposure to hazards.*
- ✓ *Promoting hand-washing with soap before meals and after defecating, which significantly reduces the risk of diarrhoeal disease.*





4 Examples of effective actions to protect children against vector-borne diseases

✓ *Using insecticide-treated mosquito nets and screening windows, doors and eaves, which provide a very effective means of protecting children against malaria as they usually go to bed earlier than adults, at the time mosquitoes become active.*

✓ *Promoting general environmental management, including improved water management in irrigated areas, placing cattle strategically between breeding places and homesteads, and drainage or filling of water collections, all of which help reduce transmission risks.*

✓ *Implementing hygiene education, designating safe places to swim (kept snail-free through regular mollusciciding, application upstream of a chemical which eliminates snails, and conducting periodic deworming, which will reduce the transmission risks of schistosomiasis and help control morbidity.*

✓ *Covering water storage containers, and periodically emptying and drying out various containers that retain water including buckets, discarded food containers, drums, flower vases and car tyres (where water can collect). This will help eliminate potential mosquito breeding sites and bring down transmission risks for mosquito-borne diseases.*

3 Examples of effective actions to protect children from air pollution

✓ *Ensuring good ventilation and use of clean fuel and improved cooking stoves, which will decrease indoor air pollution and the exacerbation and development of acute respiratory infections.*

✓ *Protecting children from smoking and from second-hand tobacco smoke, which reduces the risk of respiratory disorders and other ill-health effects later in life.*

✓ *Using unleaded gasoline, which reduces lead exposure and prevents developmental disorders in children.*

✓ *Establishing sound transportation policies to reduce respiratory illness and unintentional injuries in urban children.*

✓ *Implementing clean air plans, which reduce the exposure of children to outdoor air pollution.*



5 Examples of effective actions to protect against chemical hazards

- ✓ *Ensuring safe storage and packaging, and clear labelling, of cleaners, fuels, solvents, pesticides and other chemicals used at home and in schools.*
- ✓ *Promoting the use of child-resistant packages for pharmaceuticals and for chemical products.*
- ✓ *Preventing the reuse of toxic chemicals containers, such as pesticides containers, for domestic purposes. In addition, familiar containers, like water or soft drink bottles, should not be used to store dangerous household chemicals.*
- ✓ *Informing parents, teachers and childminders about the potential chemical hazards in the places where children spend time.*
- ✓ *Training health care providers on the recognition, prevention and management of toxic exposures, and on the use of the paediatric environmental history to investigate specific risks to which children are exposed.*
- ✓ *Incorporating the teaching of chemical safety and health into school curricula.*
- ✓ *Creating and enforcing legislation to promote the safe use and disposal of chemicals.*
- ✓ *Promoting policies to reduce and remedy environmental pollution.*
- ✓ *Avoiding the construction of homes, schools and playgrounds near polluted areas and hazardous installations.*
- ✓ *Promoting "poison-control" educational campaigns.*

6 Examples of effective actions to protect against unintentional injuries (accidents)

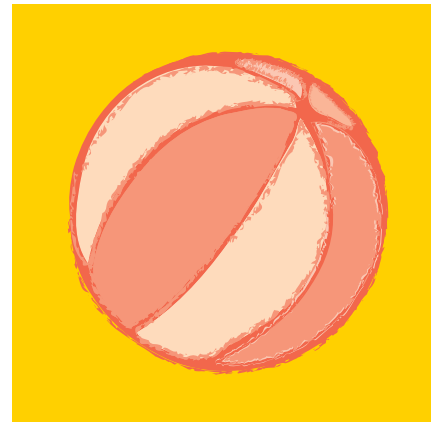
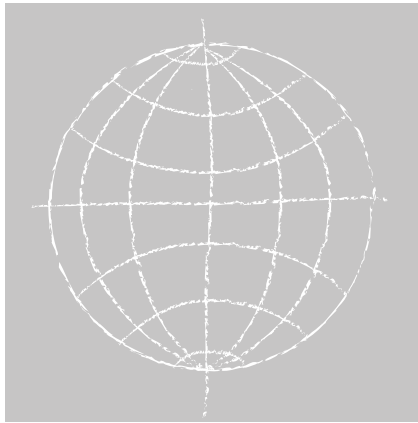
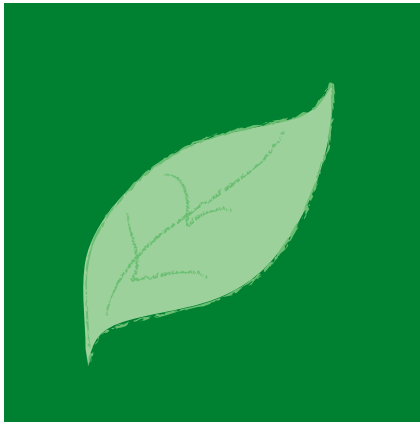
- ✓ *Developing national policies on injury prevention and advocating for greater resources.*
- ✓ *Improving enforcement of existing laws.*
- ✓ *Instituting systematic surveillance for unintentional injuries.*
- ✓ *Educating community members in first aid.*
- ✓ *Coordinating emergency services.*
- ✓ *Installing window guards and bed rails in the home.*
- ✓ *Using helmets when riding on motorcycles, scooters and bicycles.*
- ✓ *Using child safety seats and safety belts in motor vehicles.*
- ✓ *Raising or enclosing cooking areas.*
- ✓ *Teaching children to swim and encouraging supervision of children around water.*
- ✓ *Developing, where possible, public awareness campaigns to teach injury prevention.*



ENSURING HEALTHY PLACES



See you not that Allah has given you whatsoever is in the heavens and whatsoever is in the earth and has blessed you with His apparent and hidden graces? (Quran 31:20)



The work of tackling environmental risks confronting children demands a concerted, coordinated approach and must focus on the places where children live. The approach must also be multisectoral and holistic, with the child at the centre. This type of intersectoral approach can only be effective if the many ‘actors’ involved—different government departments such as health, education, housing, energy, water and planning, and members of the community such as parents, teachers, health and social workers—work together in a truly integrated, multisectoral partnership.

The reasons and the mechanisms leading to inequalities in health have often been analysed. Evidence has shown that ill health, degraded environment and poverty have strong linkages and are mutually reinforcing. For communities, as for families and individuals, life cannot be divided into “aspects” and “sectors”, and health cannot be separated from other elements. For this reason the right approach to health and environment matters is to be found within the totality of human needs. That is how “quality of life” can be understood and improved.



The Regional Office is advocating a broader approach to health by promoting community-based initiatives on a priority basis. These initiatives include Basic Development Needs, Healthy Villages programme and Healthy Cities programme, which emphasize the role and contribution of women and children as important stakeholders in an integrated development process. The approach aims at achieving a better quality of life through an integrated bottom-up socioeconomic development process offering practical methods for active community involvement, self-management and self-reliance facilitated by dynamic intersectoral collaboration.

The process produces a positive impact on health and environment by focusing on vulnerable groups such as the very poor, women, children and youth. The interventions are delivered in specific settings such as homes, neighbourhoods, schools, hospitals and communities at large and are under implementation in almost all countries of the Region, at various stages of development. These initiatives have resulted in significant and sustainable improvements in health, environment and quality of life indices, particularly among women and children.

Community-based initiatives provide an effective platform and mechanisms for the delivery of messages and interventions related to the environment and children’s health. Within this context, cost-effective and culturally appropriate methods can be used to improve the quality of children’s homes, schools and the community environment. At the same time, working in the child’s environments can provide a good opportunity to reach a wide range of stakeholders with education and information about improving the environment and protecting their children’s health.



A success story on community-based initiatives



Radia is an unskilled woman living in Naiema village in the White Nile state of Sudan. The people of Naiema are working together implementing Basic Development Needs (BDN) projects in collaboration with the Ministry of Health and the World Health Organization. Radia belongs to a poor family and lives in an old house with her three children, aged 9, 11 and 14 years. Radia suffers from thyrotoxic goitre and needs long-term treatment. Following the death of her husband nine years ago, she faced the risk of losing opportunities to educate her children and continue her medical treatment.



Radia had started selling food at the local school, but she had to carry her goods on foot to the school, a considerable distance from her house. The big break in her life came when the Village Development Committee extended support to her for an income generation project under the BDN programme. With a small loan, she opened a home-based grocery shop. Within a short time she had saved enough to buy two goats to provide milk to her children and to boost her income through selling the excess milk.



With the increased income she is now able to afford school costs for her three children. Currently she is building a new extension to her house that will provide additional kitchen space and a living room. She attends to her medical treatment and follows up at the health centre.

Despite all her commitments, Radia repaid the full amount of her loan within the agreed period and she is now self-reliant. In one of the meetings with the local women, she said “for the last one year, not one of my children has suffered from diarrhoea or any other serious ailment”.

Environmentally Healthy School Initiative (EHSI) in Jordan

The Environmentally Healthy School Initiative in Jordan was launched in 1996 in three pilot schools, as a collaborative effort between nongovernmental organizations and government agencies in Jordan. The project engaged community leaders, parents, students, teachers, and other school staff in improving the school environment and making schools safer and healthier places for children to learn, play and grow.

Community support groups were organized to work with the schools. Working tools and education and awareness tools were developed to guide the schoolteachers and students. Collective efforts of the schoolchildren (aged 9 to 14), their teachers and communities were directed at improving the health of school personnel, families and community members, and at working with the community to help them understand how the communities could contribute to health and education. Improvements to the school environments included improved sanitation and better water supplies. Schools launched water conservation efforts, sanitation and hygiene awareness efforts, tree plantings and cleaning campaigns.



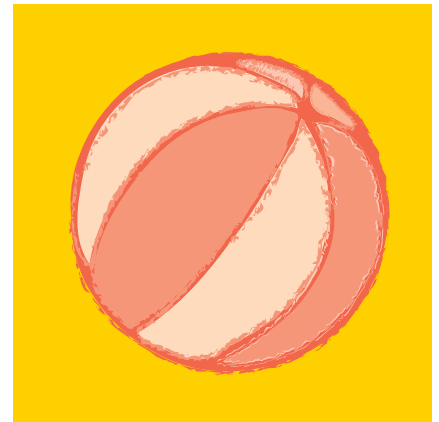
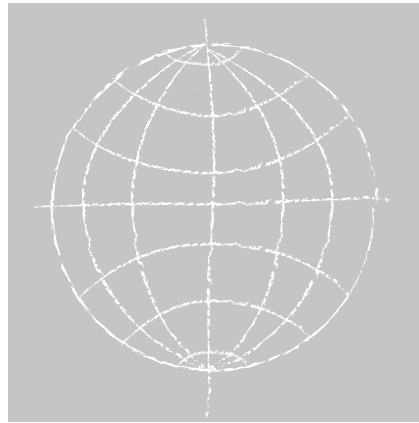
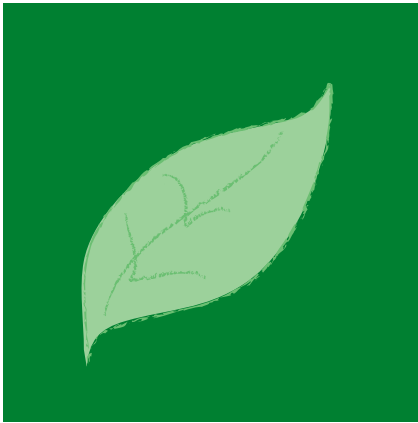
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EFFECTIVE INITIATIVES FOR HEALTHY ENVIRONMENTS



[Among health-promoting and health-destabilizing factors are the following]: air and everything associated with it; food, water and water sources, and everything associated with them; bodily release and congestion; countries and their climates; housing; movement and stillness of the body and mind, including sleep and wakefulness; changes due to ageing; race/ethnicity; trades and occupations; habits and customs. (Ibn Sina, 980–1036 AD)



Environmental health issues have been the focus of increasing concern in recent years. The Earth Summit and subsequent developments, including the adoption of the global and regional strategies for health and environment and the Beirut Declaration on Action for a Healthy Environment, have raised awareness on environmental issues and placed them high on the international agenda. Governments and communities have mobilized effective strategies that are being implemented at various levels and in various settings to improve environmental and health conditions of the population as a whole and children in particular. These include major initiatives to improve access and quality of water and sanitation, and to control air pollution. Phasing out of leaded gasoline is another major initiative in countries, and will be instrumental in helping to reduce lead pollution. Overall, however, the regional situation remains far from satisfactory, and more efforts are needed.



There is clear evidence that environment-related disease can be controlled, even in the world's least developed countries. For example, millions of lives can be saved through the integrated management of child health. Integrated management of child health (IMCI) addresses the prevention and treatment of pneumonia, diarrhoea, malaria, malnutrition, measles, and worm infestations. IMCI also promotes key family practices that include hand-washing and safe disposal of faeces, and ongoing research about the best ways to reduce indoor air pollution and its effects on child health. IMCI, through its infant and young child feeding component, promotes exclusive breastfeeding, the most powerful and effective means of reducing the incidence and severity of childhood diarrhoea. Integrated management of pregnancy and childbirth reduces maternal and newborn deaths.

The Global Strategy on Infant and Young Child Feeding promotes exclusive breastfeeding and adequate complementary feeding practices that can protect from environmental threats. The Framework Convention on Tobacco Control addresses, inter-alia, second-hand tobacco smoke through a legally binding international treaty. The FRESH (Focusing Resources for Effective School Health) initiative advocates for the provision of safe water and sanitation in schools, health and hygiene education, school-based health and nutrition services, and health-related school policies.

Over the last 10 years, an increasing number of countries in the Region have been actively promoting and implementing, with support from UNICEF and WHO, the iodization of all edible salt to combat iodine deficiency, which threatens children even before they are born and which is the single most important preventable cause of brain damage and mental retardation. Iodine deficiency is caused by a lack of iodine in the soil, from which iodine may be washed out due to erosion over a long period. Most if not all of the countries in the Region are prone to this deficiency. Schoolchildren can be advocates for sustainable salt iodization by bringing a bit of salt from home every 3 months or so to be tested for iodine.

Education is an essential tool for imparting healthy behaviour and achieving real benefits from improvements to the environment in which children live learn and play. Raising the awareness of policy-makers and decision-makers, community leaders and family members about environmental risks factors and information dissemination through mass media, traditional media and interpersonal communication are prerequisites for ensuring healthy environments for children.

New Home, New Life

This programme has become essential listening for Afghans ever since the serial drama—Afghanistan's first—was launched in 1994. It is broadcast by the BBC in Pashtu and Dari three times a week and has attracted millions of followers in Afghanistan and in refugee camps in the Islamic Republic of Iran and Pakistan. The story began by following the lives of refugees returning from Pakistan to three villages in central Afghanistan and has continued to reflect faithfully the concerns of Afghans through the difficult years.

The stories appeal to men, women and children alike. The language used is well understood by common people and its satirical attitude towards sensitive issues is culturally appropriate and well-accepted. The stories cover a wide range of important subjects of daily life, from landmines to personal hygiene and sanitation. The programme has proved to be a popular and cost-effective public health intervention for health promotion and health education messages. WHO and other United Nations agencies continue to support this programme technically and financially.



IMCI

Integrated management of child health, covering curative, preventive and health promotion aspects, has been introduced in 15 of the 23 countries in the Region and is being implemented in over 1000 districts. The strategy is flexible and can be adapted to different levels of development of health systems and diverse socioeconomic situations in both low-income and middle-income countries. The issue of long-term sustainability has been addressed in the Region by introducing IMCI elements in the curricula of 12 medical schools in three countries, and starting the process in another two countries, and by developing plans for child care community interventions, linking them to existing community-based initiatives whenever possible.



Iqra' litifik: read to your child

My name is Hosna. I am a 9 year-old Egyptian girl. I have two brothers. We learned in school that "a book is our best friend" because it shows us many things, teaches us, builds our imagination and tells us interesting stories.

Our teacher told us about low-price books made especially for us, children, entitled Iqra' litifik, which are affordable for everyone (one Egyptian pound a book...wow!). When I went home, I was surprised to find that father had bought me two books from the series. Before, we could not buy books because they were very expensive for us.

The first book talked about our environment; a fact that impressed me was the importance of greenery in our life! I did not know that, besides other advantages, it cleans the air we breathe. As I live in Cairo, one of the most polluted cities, I looked around and found very few green places in my beloved city. The book showed me the harm children themselves may do to their environment when they cut or destroy trees and smaller plants. It is amazing how ordinary habits can preserve or destroy our lives.

You know what else? Television spots also encouraged my mother to read with me and my brothers, so now every night Mummy sits with us reading a book that describes to us new things and teaches us about health and our environment.



Environmental health awareness

I am Mohammed, a health education specialist working for the Environmental Health Department in Morocco. Lack of appropriate teaching and education materials is a primary obstacle in work promoting health and environment among women and children in the rural areas of Morocco. In 2001, I attended a national workshop on promoting the WHO/Centre for Environmental Health Activity's package on environmental health training and education materials. Through this I learned about training materials such as posters, photos and television shots that are being used in Jordan, Lebanon, Oman, Saudi Arabia and the Syrian Arab Republic. In fact, I adapted some of these training materials and am planning to use them in my programme during 2003 to demonstrate good sanitation practices and safe use of pesticides at home and in agriculture. By the way, I myself am a good cook, and thanks to the WHO poster my dishes are safe as well as tasty, as I follow the golden rules for food preparation.

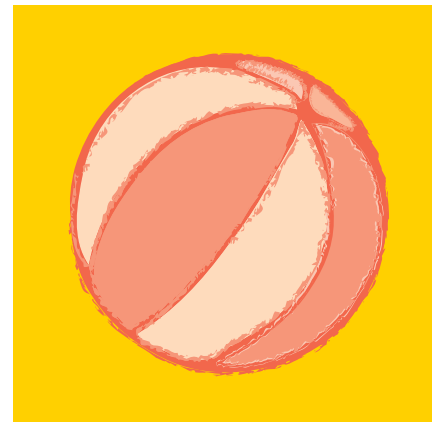
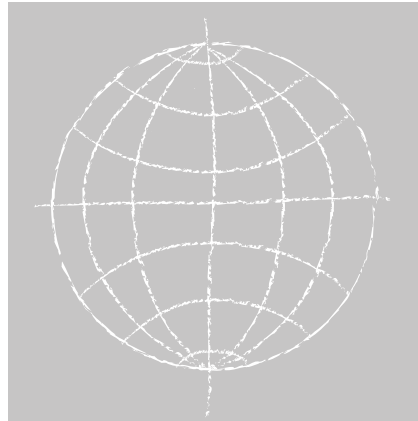
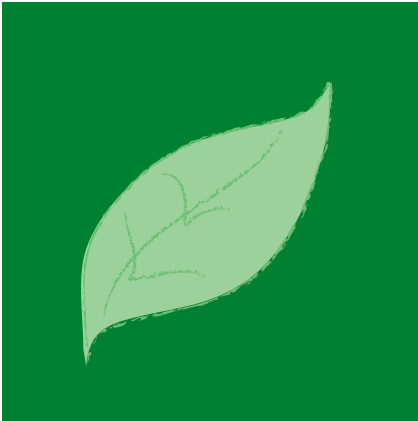


THE HEALTHY ENVIRONMENTS FOR CHILDREN ALLIANCE



At the beginning of this Summit, the children of the world told us in a simple yet clear voice that the future belongs to them, and accordingly challenged all of us to ensure that through our actions they will inherit a world free of the indignity and indecency occasioned by poverty, environmental degradation and patterns of unsustainable development.

(Johannesburg Declaration on Sustainable Development, 2002)





WHO delegation to the World Summit on Sustainable Development

Many countries, international agencies and nongovernmental organizations have expressed a strong need to establish a broad-based alliance that draws on the unique and complementary strengths of many different parties.

The Healthy Environments for Children Alliance envisions a movement involving various government sectors (at local and national levels), civil society groups, nongovernmental organizations, the private sector, United Nations family, foundations, research and academic groups, and the children and their families themselves.

By working together, members of the alliance can effectively address the needs that exist in many communities and countries to develop and implement effective programmes and policies. Moreover, by working together they will be able to accomplish tasks and objectives that might otherwise be lengthy or impossible.

The alliance will draw upon new and compelling evidence about the effectiveness of various interventions to tackle the different dimensions of children's environmental health. Such knowledge will be linked to national and community action and used to mobilize additional resources for implementation. A strong and multisectoral alliance can advocate globally for increased resources to promote healthy environments for children and for the use of effective tools. In each area of environmental risks, many players are already active.






Many cost-effective solutions already exist. It is crucial to build on previous and ongoing work, and to highlight the potential value that will be added as alliance members are drawn into scaled-up actions that are globally as well as locally oriented. This will require high-level commitment for a new and innovative approach to children's environmental health which draws on the expertise and resources of a wide range of stakeholders.

Global orientation, advocacy and resource mobilization are essential to make the alliance work effectively. National movements are also vital for creating and ensuring safe and healthy environments for children and for promoting good hygiene behaviours.

The alliance will support national and local movements that are visible and vibrant, and will stimulate the efforts of different stakeholders, coordinate actions and strengthen networks. Such national movements can help identify the main environmental risks, develop strategies to raise awareness and spur action within communities, and promote education and research on environmental health issues.

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