

# Creating healthy environments for children

Tomorrow (April 7) is World Health Day. This year's theme is "Shape the Future of life. Healthy Environments for children." We publish below an extract from a media kit by the WHO dedicated to children.

*The children of today are adults of tomorrow ....*

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 - **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 they cause the bulk of environment related deaths and disease among children.

There are many solutions to these 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 implemented by policy - and decision-makers, householders, communities,

educators, government officials and many other stake holders.

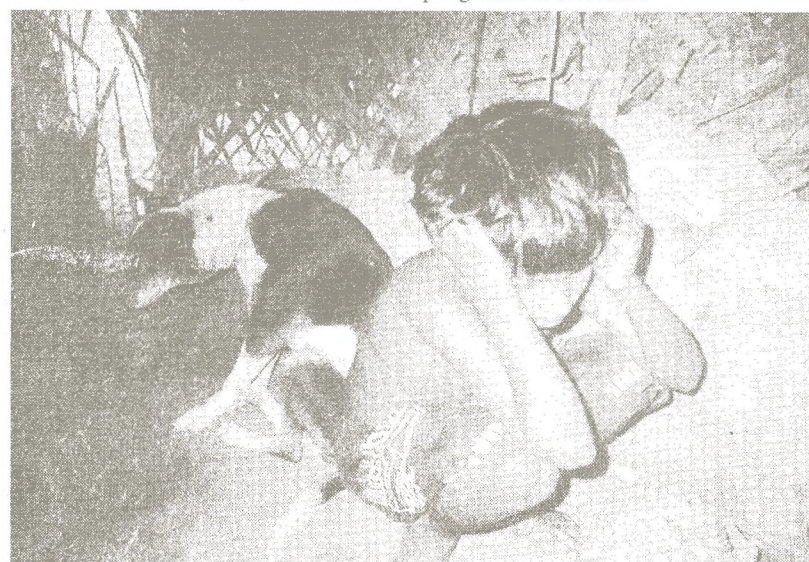
## Safe household water

Contaminated household water can transmit diseases lack of water can prevent minimum hygiene behaviours to protect health.

Among water borne diseases diarrhoea is the world's second biggest child killer. 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, which may be acquired whilst collecting water from infested sources.

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.



## Healthy environments - a guide to Parents, Community

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|--------------------------------|---------------------------|--------------------------|------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------|
| Make public places smoke free. | Organise waste management | Advocate for safer roads | Avoid excessive use of pesticides. | Clean up your neighbourhood and eliminate stagnant water collections. | Wash your child's and your own hands with water and soap before preparing food and eating, and after defecating. | Store household cleaning products, pesticides, and other harmful toxins away from children. | Avoid cooking in open fires inside the house. | Teach your child good hygienic habits. (WHO) |
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## Interventions

Safe water storage at home - and treatment of water in the home when its quality is in doubt - reduces water contamination and leads to proven health benefits.

Reliable safe water supply in schools has a direct impact on health.

## Hygiene and sanitation

The safe disposal of human faeces - including those of children - is a prerequisite to 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 infection with helminth and with trachoma. Trachoma causes irreversible blindness and today about 6 million people are visually impaired by this disease.

## Intervention

Ensure that children have access to safe sanitary facilities and that children's faeces are safely disposed of.

Proper waste management and relocation of waste dumps away from human settlements.

Washing hands with soap before meals and after defecating significantly reduces the risk of diarrhoeal disease.

## Air pollution

Air pollution is a major environment related health threat to children and a risk factor for both chronic and acute respiratory disease as well as other diseases.

**INDOOR AIR POLLUTION** is a major factor associated with acute respiratory infections 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.**

**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.

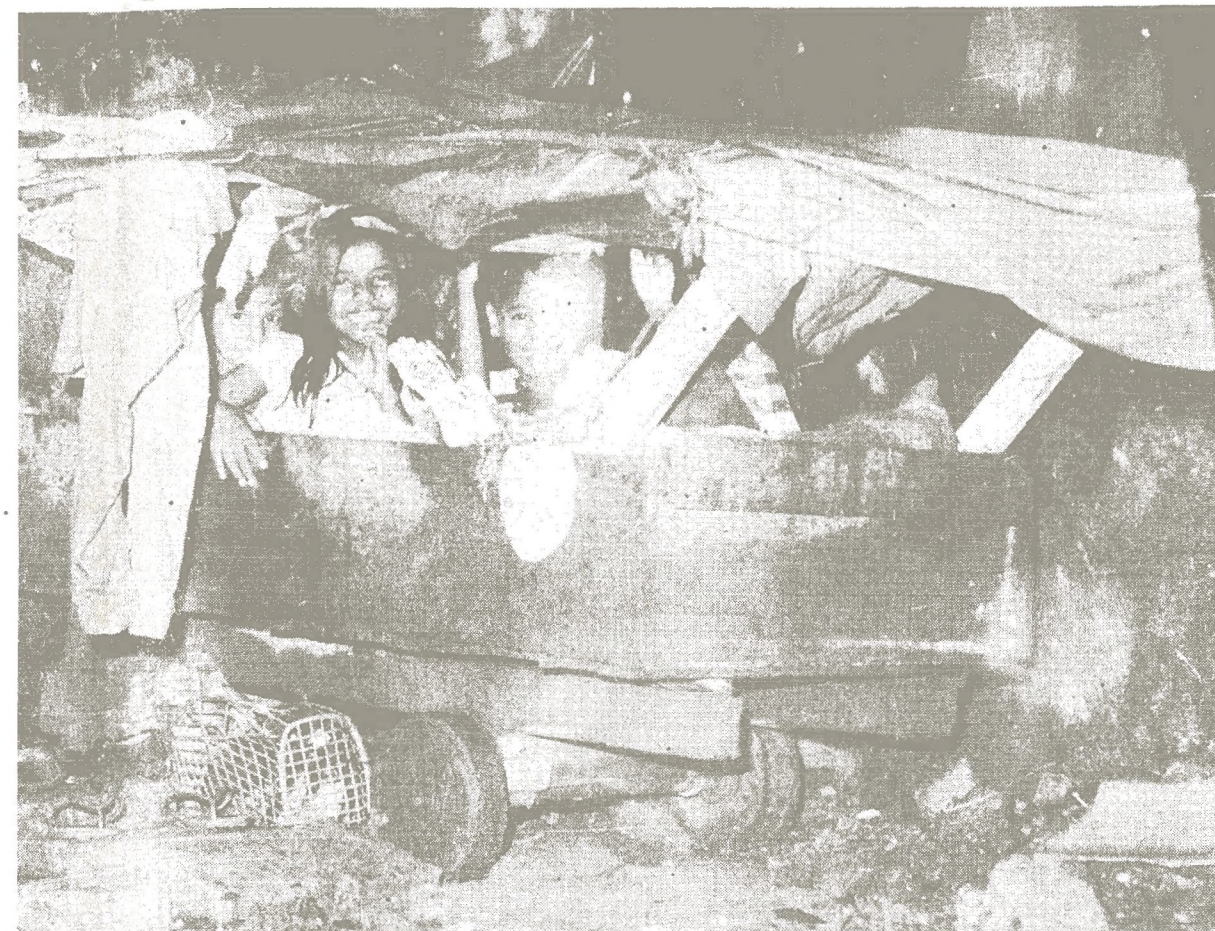
## Interventions

Good ventilation, clean fuels and improved cooking stoves decrease indoor air pollution and the exacerbation and development of acute respiratory infections.

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

## Diseases

All vector-borne diseases are serious threats to children's health. Some how-



ever, 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:

**Malaria**, which is transmitted by the mosquito, overwhelmingly kills children.

**Lymphatic Filariasis**, an infection of parasitic worms lodging in the lymphatic system, can cause the deformations typical of the disease ("Lymphedema" and "hydrocoele") in children as young as 12. The decrease in healthy life caused by this disease is second only in its magnitude to malaria.

**Schistosomiasis**, a water-based disease caused by blood flukes (worms that live in the blood-stream), affects children and adolescents. Chronic infection leads to debilitation and degenerative disease.

**Japanese encephalitis** outbreaks particularly affect children under five (about 90 percent of cases); an average of 40,000 clinical cases are estimated to occur each year. Of the survivors, 50 percent will be affected mentally for life.

## Interventions

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, may help reduce transmission risks in some settings.

Cover water storage containers and periodically empty and dry out various containers that retain water including

buckets, discarded food containers, drums, flower vases, and car tyres (where water can collect. This will help bring down dengue transmission risks.

Chemical pollutants are released into the environment by unregulated industries or are emitted from heavy traffic or toxic waste sites.

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. Chronic exposure to various pollutants in the environment is linked to damage to the nervous and immune systems, and to effect on reproductive function and on development.

For example, children are very vulnerable to the neurotoxic effects of lead in paint and air, which may reduce their IQ and cause learning disabilities. They 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 pollution are preventable.

## Unintentional injuries (accidents)

Unintentional injuries include road traffic injuries, poisonings, falls, burns and drowning.

World-wide the leading causes of death from unintentional injury among children are **road traffic injuries** (21 percent of such for this age group) and **drowning** (19).

Improve enforcement of existing laws. Institute systematic surveillance for unintentional injuries. Educate community members in first aid. Coordinate

## The health profile of the Lankan child

22 per cent of children under 5 years are stunted i.e. significantly shorter for their normal age. Stunting delays growth and delays onset of menarche in girls.

15 per cent of children are wasted i.e. significantly lighter for their normal age

Approx. 18 per cent of the entire population including children are deficient in iodine.

Over 30 per cent of all pregnant women and half of all pre-schoolers are anaemic due to low iron stores.

One third of all children under 6 years are deficient in Vitamin A which affects their eye sight.

Around 17 per cent of children born in the past 5 years had lower than the specified 2.5 kgs weight.

One of the chief causes for stunting wasting and low birth weight is malnutrition. According to a Demographic Health survey of 2000 more girls suffered from acute malnutrition than boys.

Most children in Sri Lanka have had at least one diarrhoeal attack a year. By the age of 5 years most children have suffered from at least 3-4 attacks of diarrhoea.