

# Leading Article

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## Children's Environmental Health Awareness

MDAL-AMIN MRIDHA

Environmental Health addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviors. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments. (WHO)

Children's Environmental Health (CEH) is based on a very inclusive definition of childhood. It is concerned with environmental exposures that occur during pregnancy as well as infancy, childhood and adolescence. It considers parenteral exposure prior to conception that may influence the health of children. It traces the influence of environmental exposures in early life on health and development across the entire human lifespan.

Children are one of the most vulnerable groups within our society. They are exposed to higher doses of pollutants in any given environment, including low-level exposures occurring during fetal development and in early postnatal life that increase the lifelong risk of chronic diseases. In many circumstances, children do not have equitable access to health care services or social protection mechanisms.

Research reports show a high degree of similarity with respect to the issues threatening the health of children. The most common problems are outdoor and household air pollution in addition to exposure to heavy metals, industrial chemicals, and pesticides. Many children still do not have adequate access to clean water and improved sanitation while infectious diseases remain a problem, especially for children living in poverty. The children now face the dual burden of undernutrition and stunting on the one hand and overnutrition and obesity on the other.

Besides the environmental risks of air pollution, inadequate water, sanitation and hygiene, hazardous chemicals and waste, children are vulnerable to environmental risks like radiation, climate change as well as emerging threats like e-waste.

The environment includes air, water, surfaces, and items with which children come in contact mainly in the following areas:

- Indoors—nursery, classroom, bathrooms, kitchen, etc.
- Outdoors—playground, lawn, sand and water play areas
- Vehicles—vans or buses used to transport used to transport children
- Storage areas—closets, basements, garage

Environmental substances and factors that can impact the health and well-being of children include: Dust, dirt, and irritants; Fragrances, smoke and airborne particles; Chemicals and toxins; Mold and Pests.

Environmental factors can cause, trigger, or exacerbate child health conditions, such as: asthma, allergic reactions, respiratory illness, nutritional illness, skin diseases and poisoning.

“Air pollution” occurs when the air contains gases, dust, fumes, or odors in amounts that could be harmful to children's health or comfort.

Indoor air pollution levels are often greater than outdoor levels. Indoor environments may lack adequate air filtration and ventilation to remove air pollutants. The presence of dirt, contaminants, moisture, and warmth can encourage the growth of mold.

One university research report showed that 25% of citizens of Dhaka are victims of air pollution and at the same time pediatric pulmonologist pointed out that air pollution is the main cause for massive increase in lung diseases. Number of patients suffering from Bronchitis, Bronchiolitis, Pneumonia, COPD, and Asthma are increasing day by day, primarily due to the harmful effects of air pollution.

Air pollution is a serious issue in Bangladesh. It gets the most attention in the major cities, but rural air pollution remains poorly understood and might also be a major problem, especially for mothers and children who are impacted the most by indoor air pollution.

Exposure to droughts leads to poorer health outcomes in early childhood. Specifically, Bangladeshi under five children are 0.10, 0.11, and 0.11 standard deviations shorter for their age, thinner for their height, and thinner for their age, respectively, if they experienced droughts during the intrauterine period.

Lead poisoning remains a problem for children all over the world and in some developing countries are exposed to lead in gasoline. Some cultures in both developing and developed countries use lead in home remedies.

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**Correspondence:** Prof. Dr. Md Al-Amin Mridha, Ex-Line Director, Medical Education & Health Manpower Development, DGME, Dhaka. Mob: +8801711178126; email: drmdalamin@yahoo.com

The World Health Organization has categorized environmental health risks to children into the categories basic, modern, and emerging.

Basic Risks (more significant for children in poverty-stricken countries)	Modern Risks (more significant for children in industrialized countries)	Emerging Risks (tend to affect all children)
<ul style="list-style-type: none"> <li>• unhealthy housing</li> <li>• unsafe water supply</li> <li>• lack of sanitation</li> <li>• indoor air pollution</li> <li>• leaded gasoline</li> </ul>	<ul style="list-style-type: none"> <li>• chronic respiratory illness and asthma</li> <li>• injuries from transport accidents</li> <li>• toxic chemicals</li> <li>• neurodevelopmental and behavioral effects</li> </ul>	<ul style="list-style-type: none"> <li>• endocrine disruptors</li> <li>• environmental allergens</li> <li>• UV radiation</li> <li>• e-waste</li> </ul>

As populations transition from low to high income, basic risks decrease and modern risks increase. The pattern of leading environmental health problems in children shifts as more countries develop.

Reducing environmental risks could prevent 1 in 4 child deaths. In 2019, Ambient air pollution attributable 2327 death in under five children Bangladesh. So, we have to adopt all awareness programs to overcome the environmental health risks.

Children’s Environmental Health Day CEHDay has been observing on the ‘Thursday 2<sup>nd</sup> week of October every year’. CEHDay is a day for child health advocates to raise awareness of the children’s environmental health issues like clean air and water, safe food and products, and healthy places for children to live, learn, and play in the beautiful world.

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