



The Problem

2.6 billion people around the world depend on food cooked over open fires and inefficient stoves, exposing them to air pollution. Exposure to household air pollution (HAP) from burning wood, charcoal, coal, and kerosene is a leading risk factor for diseases, including childhood pneumonia, chronic obstructive pulmonary disorder, ischemic heart disease, stroke, and lung cancer. When pregnant women are exposed to HAP, their infants are at increased risk for stillbirth, low birthweight, and decreased lung function. Globally, up to four million people die prematurely each year from illnesses attributable to HAP.

The Solution

Replacing open fires and inefficient stoves with cleaner, more modern stoves and fuels reduces emissions and personal exposure, lowering the burden of disease associated with HAP. Research evidence suggests that significant exposure reduction is required to reduce negative health impacts. Therefore, substantial improvements in health can only be achieved with intensive, near-exclusive use of the lowest-emission cookstoves and fuels.

With a successful transition to clean cookstoves and fuels, randomized control trials have shown reductions in severe pneumonia in young children, reduced duration of respiratory infections in children, lower blood pressure in pregnant women, increased birth weights, and increased gestational age at delivery. Achieving these positive health outcomes necessitates a strong supply to ensure long-term access to high-quality stoves and fuels; consumer education promoting consistent and exclusive use; as well as policies to increase availability and affordability of clean cookstoves and fuels.

Health Impacts of Cooking

- **Up to 4 million premature deaths each year** are attributable to household air pollution from cooking, lighting, and heating.
- **The leading environmental risk globally** is air pollution.
- **16% of ambient air pollution globally** comes from household air pollution, further contributing to the burden of disease.
- **Negative birth outcomes** are linked to pregnant women who cook with inefficient stoves and fuels.
- **Over 450,000 children under 5 die each year** primarily in sub-Saharan Africa and Asia, as a result of household air pollution.
- **The cost of relying on polluting stoves and fuels** is around \$2.4 trillion each year, mainly due to health costs.