Firewood and Pneumonia:

A Fatal Combination in Humanitarian Settings

THE SETTING

More than 40 million people are currently displaced by armed conflict and human rights abuses, forced to leave their homes and seek safety in refugee camps, in urban areas and with extended family.

Although the consequences of indoor air pollution are felt by nearly all people who cook with solid fuels (some 80 percent of the world's population), displaced people are particularly vulnerable due to their status and, often, lack of control over how and with what they cook.

THE ISSUE

Displaced people living in camps are provided with the bare essentials for survival: basic shelter, food and water. The food distributed by humanitarian agencies—typically dried beans, rice or whole grains—must be cooked before it can be eaten. However, cooking fuel is generally not provided.

THE DANGERS

Because fuel is not typically provided, displaced women and girls must regularly find firewood to cook food for their families.

Firewood collection exacerbates environmental degradation around camps, and burning wood indoors releases toxic smoke, causing respiratory infections that kill more people every year—especially babies and young children—than malaria. In addition, when they leave camps to search for firewood, women and girls risk being raped, beaten or even killed. Physical assaults during firewood collection can cause lasting physical and psychosocial damage.

Families, and especially children, are also at risk of burns and death resulting from fires caused by improper use or storage of cooking fuels and by fires that spread easily in crowded camps and poorly designed shelters.

THE EFFECTS OF BURNING FIREWOOD INDOORS

When firewood is burned inside the home, toxic fumes fill the lungs of children and threaten the health of the entire family. According to the World Health Organization (WHO), 1.5 million people die every year from respiratory diseases related to smoke inhalation, most of them women and children.¹

The use of biomass fuels like firewood for cooking or heating leads to high levels of indoor air pollution, especially when burned on traditional stoves or open fires indoors. Use of unsafe or inappropriate fuel sources (e.g., plastic, waste) can also lead to acute or chronic diseases.

Women spend an average of three to seven hours per day near the stove preparing food. Young children are often carried on their mother's back or kept close to the warm hearth. Consequently, infants spend many hours breathing indoor smoke during their first year of life when their still-developing lungs





Burning wood indoors on an open fire produces smoke that can cause pneumonia and other respiratory illnesses.

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make them particularly vulnerable to hazardous pollutants. Fifty-six percent of all indoor air pollution-attributable deaths occur in children under five years of age.²

PNEUMONIA AND RESPIRATORY ISSUES

There is consistent evidence that exposure to indoor air pollution increases the risk of pneumonia among children under five years.

Globally, pneumonia and other acute lower respiratory infections represent the single most important cause of death in children under five. Exposure to indoor air pollution more than doubles the risk of pneumonia and is responsible for more than 900,000 annual deaths from pneumonia.³

Using clean-burning alternatives to firewood will help decrease indoor air pollution, saving the lives of infants and young children.

OUR WORK

The Women's Refugee Commission's Fuel and Firewood Initiative works to:

- Collaborate with partners such as WHO to develop guidelines that address the need for safe access to cooking fuel in humanitarian crises, specifying who needs to do what, when;
- Disseminate the guidelines to humanitarian workers around the world and provide training and technical assistance on their use;
- Identify and encourage rigorous field testing of the most promising alternative fuels and energy technologies for use in humanitarian settings;
- Solicit funding to increase technical expertise of humanitarian workers, to research and develop new, cleaner-burning fuels and energy technologies, and to supply those fuels and technologies to the

humanitarian settings where they are needed most.

Notes:

1 World Health Organization. "Fuel for Life: Household Energy and Health", p. 4. 2006. www.who.int/indoorair/publications/fuelforlife.pdf 2 WHO. Indoor air pollution and health. www.who.int/mediacentre/factsheets/fs292/en/3 lbid.

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