

# Cooking Fuel Saves Lives: A Holistic Approach to Cooking in Humanitarian Settings

## Women's Refugee Commission

### Background

*In complex emergencies, the humanitarian system tends to address issues of concern by focusing on individual sectors, such as health or food. However, the Women's Refugee Commission has found that when it comes to cooking fuel, an integrated approach is essential. Recognizing the cross-sectoral nature of cooking fuel, the Women's Refugee Commission and the InterAgency Standing Committee Task Force on Safe Access to Firewood and alternative Energy in Humanitarian Settings (SAFE task force) developed a framework outlining the key fuel-related challenges and solutions across eight sectors of humanitarian response. This comprehensive and holistic approach to all eight sectors is necessary to ensure that displaced women and their families have safe access to appropriate cooking fuel. Below is information on the health sector.*

In addition to establishing health clinics and providing care, health actors undertake education campaigns on the prevention and management of health concerns, such as hand washing and sanitation.

### The Problem

When displaced women and children are exposed to noxious smoke and indoor air pollution (IAP) from cooking fires day after day, often for as much as seven hours per day, they are prone to respiratory illnesses such as pneumonia. According to the World Health Organization (WHO), indoor concentrations of toxins such as carbon monoxide in smoke from cooking fires may be 15 to 20 times higher than accepted levels. Such elevated levels of toxins are especially dangerous to babies and young children, whose lungs are still developing and who are often near their mothers during cooking. Moreover, babies and young children are especially susceptible to dying from re-

spiratory disease: pneumonia and tuberculosis are two of the top five killers of children under five worldwide. Over all, respiratory infections caused by IAP are responsible for more deaths every year than malaria (1.9 million annually).<sup>1</sup>

In humanitarian settings, cooking is often done inside shelters that are designed to keep the elements—sun, rain, dust, wind—out, meaning that



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such shelters are likely to be poorly ventilated, so smoke from cooking fires stays trapped inside for long periods. Families often sleep in the same single room where the cooking fire is located, increasing their exposure to toxins and exacerbating health risks. A woman in Nayapra refugee camp in Bangladesh told the UN High Commissioner for Refugees of her experience cooking before she was provided with a cleaner-burning stove: “Sometimes my eyes were burning, tears were flowing, my whole house became smoky and all the children suffered.”

When sufficient cooking fuel is not available, foodborne disease or malnutrition can result from eating or undercooked or raw foods. Lack of fuel also made it more difficult to contain the spread of cholera in post-earthquake Haiti, since many families had to choose between using their limited fuel for cooking or for boiling water.

Another widespread health risk in camp settings are burns and scalds resulting from improperly tended cooking fires, or from house fires caused by cooking. In many cases, mothers leave their young daughters in charge of the cooking fire when they go out to collect firewood or to attend to other household chores. Without proper training, these girls—often as young as five or six—may not tend to the fire or to the cooking pots properly; as a result they are the most common victims of burns and scalds.

## The Solution

Health workers can help minimize the exposure of women and children to IAP by advocating for the use of cleaner-burning cooking fuels and stoves, particularly those that contain the fire’s flames—resulting in both efficiency and safety improvements. Promoting the design and building of better-ventilated shelters or safe, outdoor cooking spaces can also help to reduce the impact of IAP. The health sector should also play a key role in providing technical advice to camp managers, shelter actors and other partners on the



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positive health and safety impacts of these new technologies. These positive impacts are multiple: a 2008 study on fuel-efficient stove programming in Darfur by ProAct Network found that incidents of “wild fires in camps due to open flames from cooking on the traditional three-stone fireplace” were common. But “with the use of fuel-efficient stoves, this has been reduced to zero.”<sup>3</sup> Moreover, the same report noted that over 60 percent of interviewees stated that they saw a reduction in kitchen smoke-related coughing after they started using fuel-efficient stoves, and that they recognized that fuel-efficient stoves produced less ash, resulting in cleaner kitchens and better, healthier working and living environments for women and their families.

Spreading awareness not only on the dangers associated with the collection and use of firewood, but on the benefits of cleaner-burning fuels and stoves, can help women move from a more familiar, yet unhealthy, way of cooking to one that can improve their health and that of their children.

<sup>1</sup> <http://www.who.int/mediacentre/factsheets/fs292/en/index.html>

<sup>2</sup> <http://www.unhcr.org/4c08eacb6.html>

<sup>3</sup> “Assessing the Effectiveness of Fuel-efficient Stove Programming: A Darfur-Wide Review,” ProAct Network Report, September 2008.