OBJECTIVES

- Assess the levels of large and small particulate matter and carbon monoxide in kitchens over 24 hours
- Investigate cooking, bathing, and trash burning habits
- Inform community members of ways to reduce exposure to indoor air pollution

METHODODOLOGY

- Visited 24 homes in six villages around Lake Atitlan in Guatemala
- Conducted interviews asking specific question about cooking habits, bathing habits, and trash burning habits as well as gathered observational data such as type of stove, presence/absence of chimney, and wall material
- Used air quality monitors to test particulate matter and CO in the kitchens over a 24 hour period
- After conducting the research, organized community-centered talks in each community to give tips on how to reduce production and exposure to indoor air pollution

CONCLUSIONS

- In 100% of the homes investigated, small and large particulate matter reached unsafe levels within the 24 hour period.
- We found extraordinarily high levels of small particulate matter – an average of 90,000 particles per cubic ft/100.
- In 50% of homes, CO levels reached above the warning level during the 24 hour period.
- Future investigation is needed to study the health consequences of such high pollution levels.

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