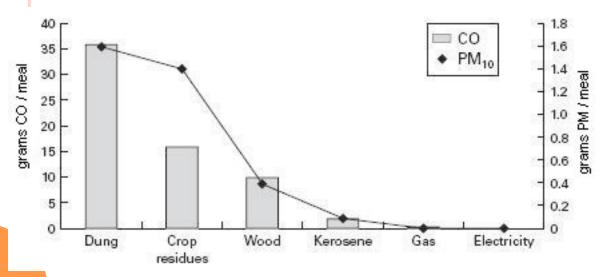
THE PROBLEM



- Ventilation in cooking areas is nonexistent, resulting in more than 1.5 million deaths per year
 - Respiratory diseases due to lack of ventilation contribute to 2.7% of the global burden of disease
- 1.8 billion people worldwide cook with solid fuels

Source: WHO

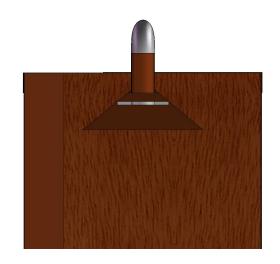
PROBLEM DETAILS



- Solid fuels can result in levels of particulate matter more than 30 times as high as modern fuels
- Carbon Monoxide levels above 70 ppm are toxic

THE SOLUTION: VENT-ELATION

- Low Power Usage
- Modular
- Low cost
- Noninvasive
- Easy Installation





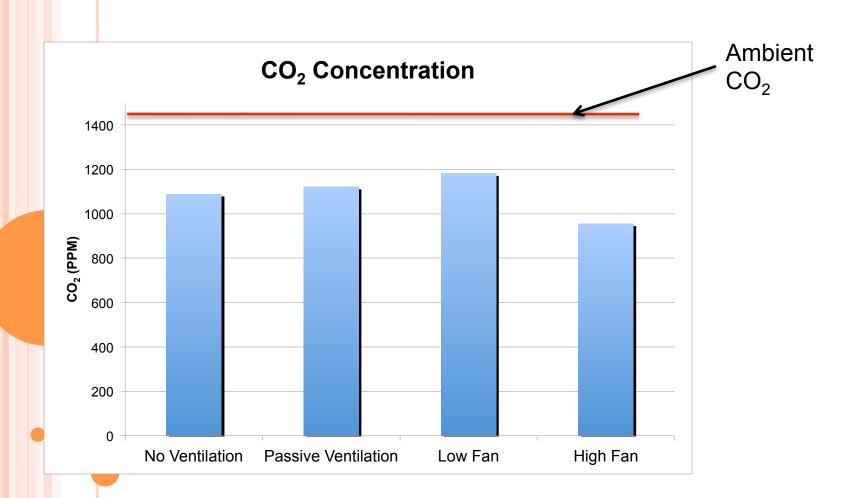
EXPERIMENTAL SETUP

- How much air flow is necessary to properly vent air?
- Measurements taken with CO, CO₂ and flow meter sensors

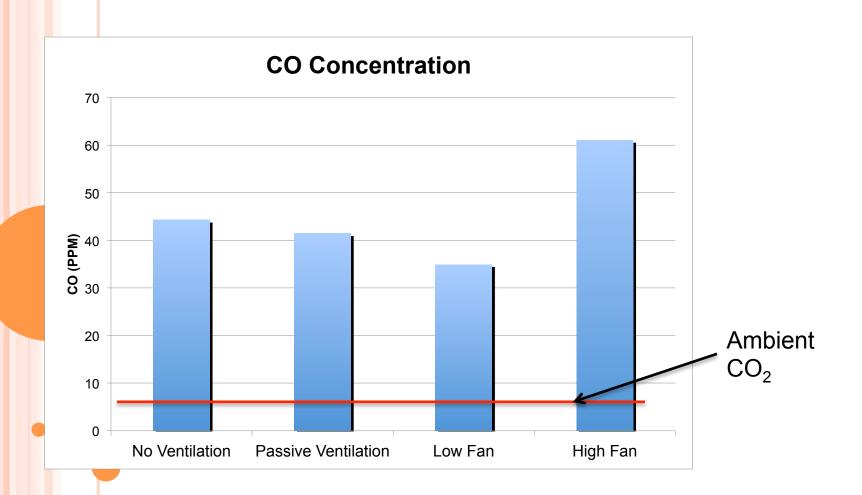




RESULTS



RESULTS



NEXT STEPS

- User Experience
 - Modularity
 - Ease of installation
- Construction from lightweight, durable goods
- Ventilation via powerless, active methods
 - Roof Turbine Vent
- Research dwelling sizes and types

QUESTIONS?