Partnership for Clean Indoor Air

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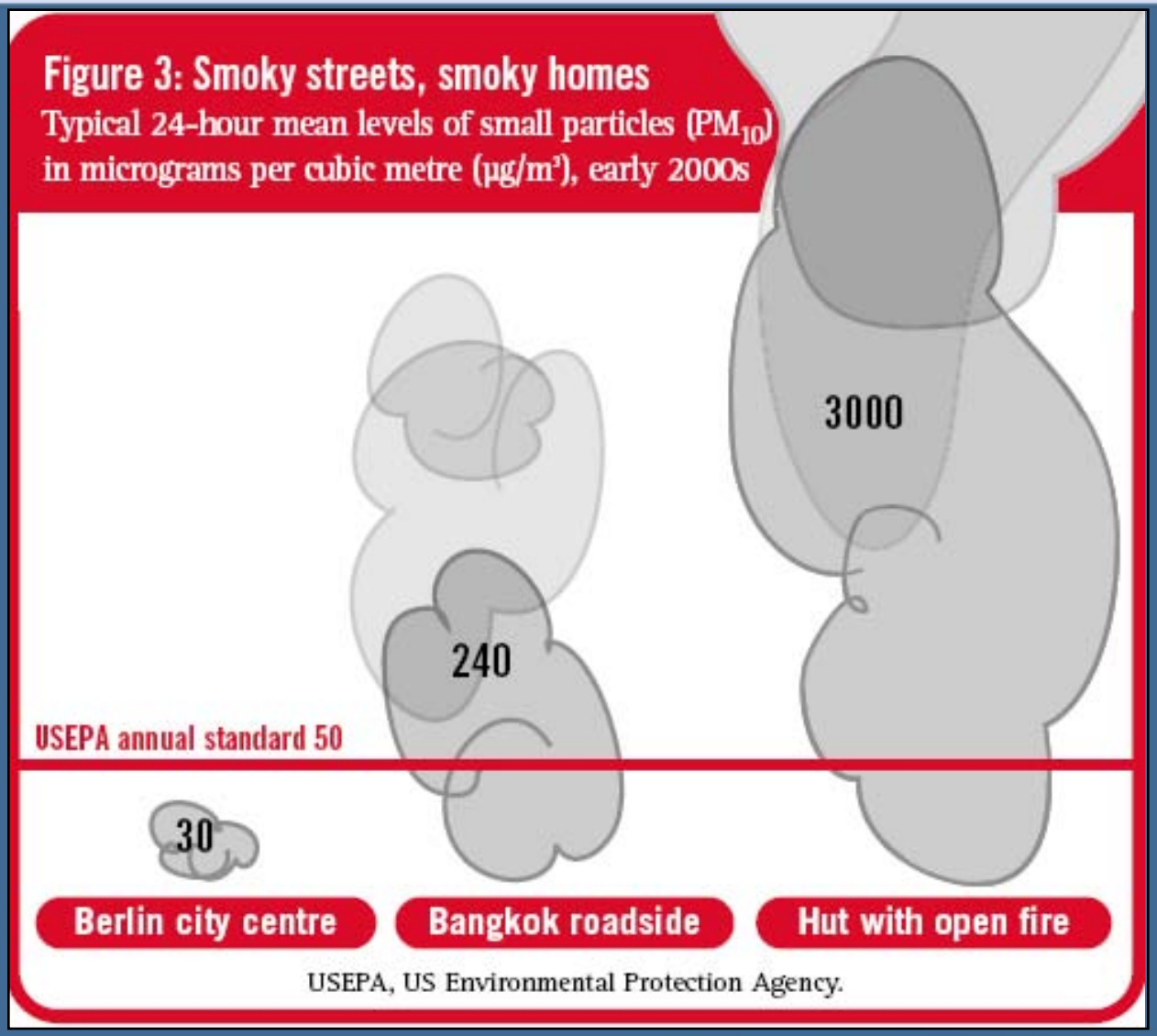
What are typical exposures?



source: WHO Fuel for Life, 2006.

WHO IAP Exposure Guidelines for PM_{10} and $PM_{2.5}$

Annual mean level	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)
WHO interim target-1	70	35
WHO interim target-2	50	25
WHO interim target-3	30	15
WHO Air quality guidelines	20	10

source: WHO AQG, 2006.

Who already uses Stove “Guidelines”

- Shell Foundation – stove benchmarks
- GTZ – 45% fuels savings over traditional stoves
- USEPA – 50% reduction in room concentration & 30% in fuel use
- Other organizations have their own guidelines

Some Benefits of Stove Standards

- Define an “improved” stove for project implementers, funders, consumers, governments, carbon organizations – based on verifiability
- Objective evaluation of technologies leading to certification against a quality standard
- Understand and transfer design features
- Promote Innovation
- Quantify Performance

Benefits of Stove Standards continued…

- What additional benefits do you see in developing voluntary, consensus stove performance guidelines for emissions and fuel use?

Some Stove Standard Parameters

- Efficiency (fuel use) – have protocols
- Safety – have protocols
- Emissions (CO – PM – others?) – have protocols
- Stove Quality/Durability – no protocols

What other parameters should be considered?

Thoughts on Standard Segmentation

- Non-chimney stoves
- Wood primarily
- Charcoal primarily

- Chimney Stoves
- Chimney stoves with plancha (wood)
- Chimney stoves (wood)
- Chimney stoves (coal)

Other segments to consider?

Options for Action

Do Nothing

- Funding organizations will continue to use their own guidelines
- Carbon Organizations might de facto define “improved” for the community
- Other consequences?

Develop our own “voluntary” standards - first

Develop standards through a ISO process – first

Next Steps – What is out there/missing?

- Build the information foundation

- Research existing stove standards
  - what is out there
  - evaluate pros and cons of each standard
  - develop options to consider

- Research existing stove testing protocols
  - what is out there
  - evaluate pros and cons of each standard
  - develop options to consider

Next Steps

- Develop a roadmap (process/timeline)
  - inclusive / transparent

- Shop the roadmap (feedback/input – funding)
  - Governments with Standards
  - Funding Governments
  - NGOs
  - UN Agencies
  - Businesses selling stoves

- Implement the roadmap

Other Thoughts …

- Not seen / not actually a US driven activity
- Many Household Energy Leaders involved
- Geograhic representation
- Inclusive and transparent
- Seek path of most credibility and least resistance
- Standards Voluntary – self testing
- Aiming for the good – not the perfect

What thoughts do you have that should be considered?