

Public Health and Air Pollution in Asia (PAPA)

*A New Initiative to Provide Stronger
Asian Health Data to Inform
Asian Air Quality Decisions*

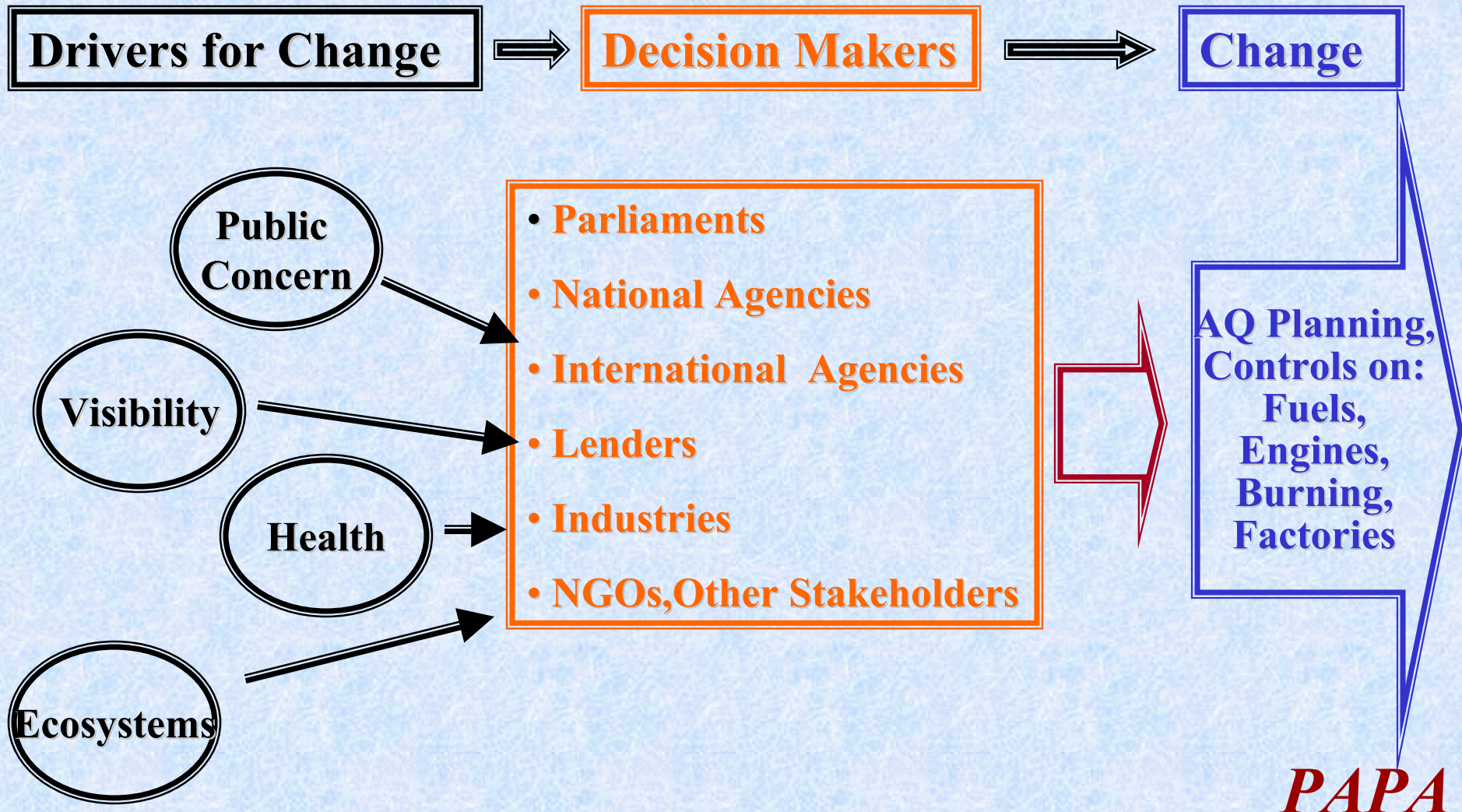
Dan Greenbaum and Bob O'Keefe
Health Effects Institute
Better Air Quality Conference
Hong Kong December 16, 2002

PAPA

The Air Quality Improvement Challenge

- Air Pollution has serious effects
 - health
 - economic well-being
 - visibility
- But controlling air pollution can be a challenge
 - economic growth can appear to conflict with improved air quality
 - change can raise fears in communities, companies
- *What will drive smart air quality change?*

Potential Drivers for Change



The Main Driver - Public Health

- Many Potentially Sensitive Populations
 - Children
 - Elderly
 - Growing number of asthmatics
- Widespread Exposure
- Potentially Very Large Impacts
 - Thousands of Premature Deaths
 - Tens of Thousands of Hospitalizations, Days of work and school lost

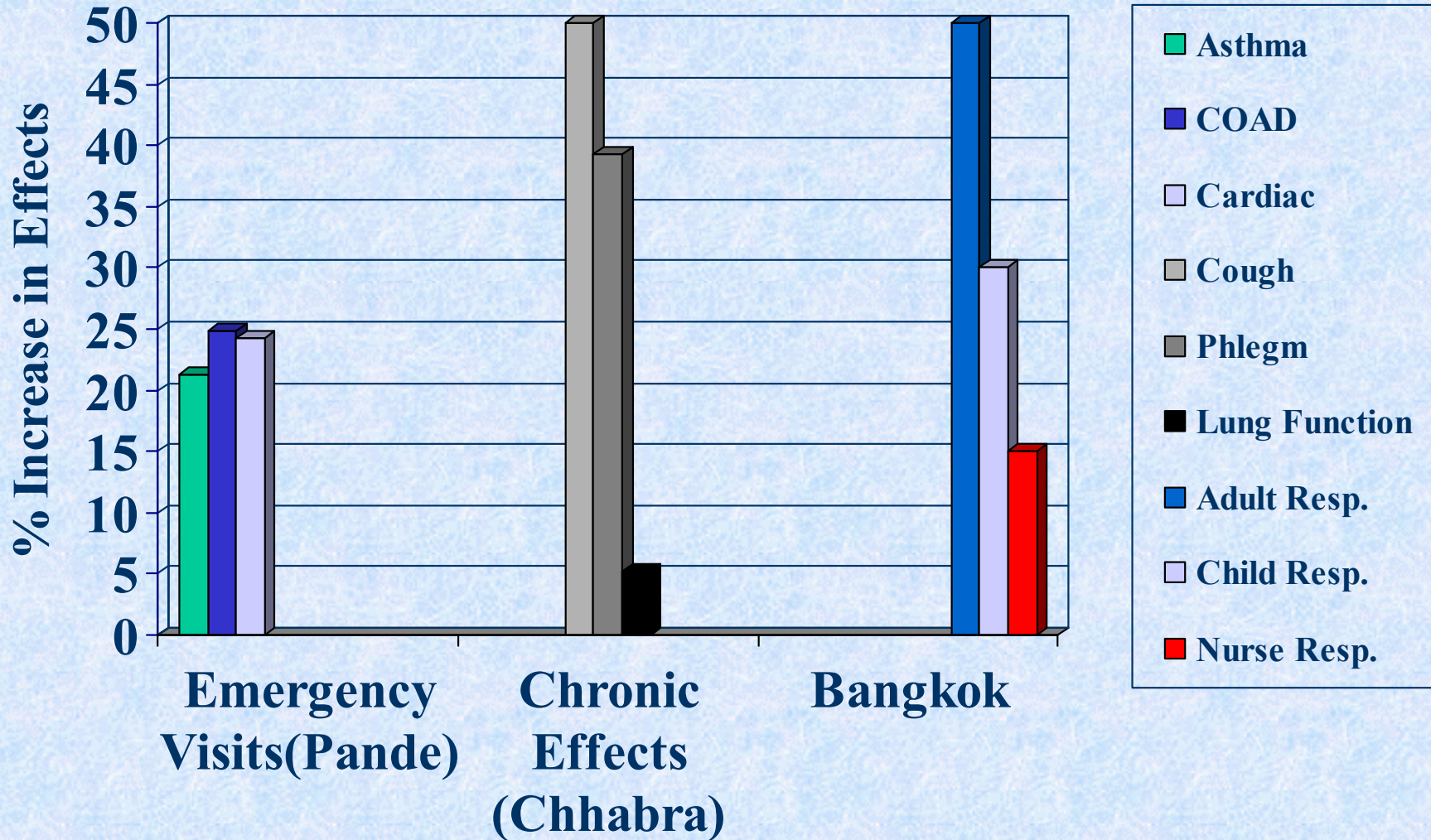
What's Been Done in Asia?

(A Small Number of Existing Studies)

<u>Country</u>	<u>Time Series Studies</u>		<u>Panel Studies</u>
	Mortality	Illness	
India		★	★
Korea	★		★
China			
Beijing	★		★
Hong Kong	★	★	
Thailand	★	★	★

PM Health Effects - India, Thailand

Source: Chhabra 2001, Pande 2001, Vichit-Vadakan, 2001



What's Needed for the Future?

- **Key Challenge:** Expanding current science base to inform Asian air regulatory decisions
- Western research relevant to Asian populations, however extrapolation poses challenges
 - Population characteristics
 - Pollution sources and mixes
- Are observed risks similar?, greater?, smaller?
- Remains a clear need for representative air pollution & health studies of *local* Asian populations

What's Needed For the Future ?

- *Local Asian Studies*
 - Decision makers act best with local data
- High Quality *and* Relevant Studies
 - Removing as many other explanations for effects as possible (e.g. smoking)
 - Targeted at answering key decision questions
- Careful assessment of *all* relevant data
- Concise, understandable, *and* continuing communication with decision makers

Meeting the need: *The PAPA Project*

- Public Health and Air Pollution in Asia (PAPA)
- New partnership within the Clean Air Initiative for Asian Cities (CAI-Asia)
 - *to enhance understanding of health effects of air pollution in Asia now and in the future*
- Carried out by the Health Effects Institute (HEI)
- Supported by government, industry, USAID, foundations, local officials, others

The Health Effects Institute

- **Founded in 1980 to provide impartial, high-quality science on health effects of vehicle and other emissions**
- **Joint and Equal Core Funding from**
 - **Government (U.S. EPA)**
 - **Industry (28 Worldwide Vehicle Manufacturers)**
- **Also partnerships with WHO, EC, California, Other Industries**
- **Independent Board and International Expert Science Committees oversee and review all research**
- **Over 200 studies - Americas, Europe, China, Mexico - ozone, carbon monoxide, particulate matter, diesel exhaust, benzene, butadiene, methanol, others**

PAPA Goals

- **A Four-Year Effort to:**
 - Produce near-term *Scientific Review* of what is known today about health effects in Asian cities
 - **And needs looking forward**
 - Initiate a *series of epidemiological studies* in four representative Asian cities
 - **Understand local impact, inform extrapolation**
 - Publish a *comprehensive assessment* of the state of air pollution and health across the four cities
 - **Help inform key regulatory & policy decisions**
 - *Build capacity* of local scientists
 - **By pairing western, eastern science teams**

PAPA: Initial Structure

- **PAPA Advisory Committee**
 - Formed through CAI-Asia & including stakeholder representatives from private sector, Government, NGOs, donors and others
 - To ensure relevance of results to Asian needs
- **PAPA Research Oversight Committee**
 - Independent scientists from HEI, Asia
 - To monitor research implementation, quality, relevance

PAPA: Selecting the Cities

- To “represent” different Asian populations, locales, pollution mixes
- Looking for:
 - Availability of high quality air pollution data
 - Access to quality health data
 - Presence of capable health researchers
 - Commitment of local agencies

PAPA: Current Activities

- Compiling all existing Asian studies for review
- Meeting with potential investigators, government agencies, NGOs, industry, others
- Assessing city possibilities in China, South Asia, Southeast Asia
 - high quality health and air data
 - interested and experienced health investigators
 - support of local governments
- Seeking additional contributing partners:
 - **Foundations, lenders, government development agencies, industry, National governments**

PAPA Timeline

- Announce PAPA at BAQ-Hong Kong, December
- Empanel Advisory, Research Oversight Committees
Early 2003
- Conduct Scientific Review, select cities 2003
- Initiate epidemiological studies at rate of one in
2003, two in 2004, one in 2005
- Comprehensive assessment to follow
- Capacity building throughout

PAPA: The Likely Result

- A growing and credible database to support decisions
- A strengthened Asian scientific community to address continuing questions over the long term
- Most importantly:
 - *Cleaner Air and Better Public Health*

Thank You!

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