

# NIEHS Commitment to Environmental Public Health

Linda S. Birnbaum, Ph.D., D.A.B.T., A.T.S  
Director

National Institute of Environmental Health Sciences  
National Toxicology Program

Partnerships for Environmental Public Health  
April 26, 2010



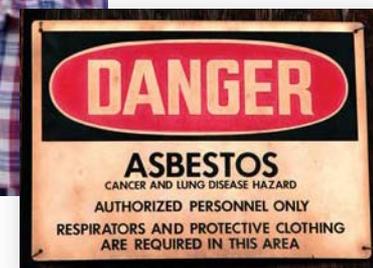
# National Institute of Environmental Health Sciences



The mission of the NIEHS is to reduce the burden of human illness and disability by understanding how the environment influences the development and progression of human disease.

# Public Health Is Integral to NIEHS

- Office of the Director
- Division of Extramural Research and Training
- Division of Intramural Research
- National Toxicology Program
- Environmental Health Perspectives



## New NIEHS Team Members

- John Balbus
- Aubrey Miller
- Paul Jung
- Erika Reed



# Research Vision

- Endocrine Disruptors and Health
- Cancer
- Autism
- Nanomaterials
- Climate Change and Human Health
- Air Pollution and Asthma
- Metal Toxicity
- Pesticides and Health
- Superfund
- Partnerships for Environmental Public Health



National Institutes of Health  
**The National Institute of Environmental Health Sciences**



### Your Environment — Your Health

The National Institute of Environmental Health Sciences (NIEHS) is one of 27 Institutes and Centers of the National Institutes of Health (NIH), which is a component of the U.S. Department of Health and Human Services (HHS). Unlike the other NIH institutes, the NIEHS is located in Research Triangle Park (RTP), North Carolina. RTP is a science and technology hub located between Raleigh, Durham, and Chapel Hill.

The NIEHS is home to the National Toxicology Program (NTP), the nation's premier program for the testing and evaluation of agents in our environment.

The mission of the NIEHS is to reduce the burden of human illness and disability by understanding how the environment influences the development and progression of human disease.

NIEHS's broad focus on the environmental causes of disease makes the institute a unique part of the NIH.

### Who We Are

The NIEHS supports a wide variety of research programs directed toward preventing health problems caused by our environment.

**National Toxicology Program.** The NTP is a federal, interagency program, headquartered at the NIEHS, whose goal is to safeguard the public by identifying substances in the environment that may affect human health. Current NTP initiatives are examining the effects of cell phone radiation, endocrine disruptors, and nanomaterials, as well as developing new approaches to advance high throughput (high speed and high quantity) screening of chemicals, and to reduce the number of animals used in research. The NTP also works to understand individual susceptibility – why some people get sick when exposed to an environmental agent and others don't.

**In-house laboratories.** In-house, or intramural research, is done by scientists employed by the federal government who have laboratories at the NIEHS. Research conducted at the NIEHS include epidemiology, biostatistics, molecular genetics, signal transduction, reproductive and developmental toxicology, respiratory biology, molecular carcinogenesis, and other environmental research areas. Our in-house scientists collaborate extensively with partners in other institutes, agencies, and academia.

**Grants programs.** Research is done across the United States by researchers who have been funded through the NIH grants program – also known as the extramural program. The largest portion of the NIEHS budget goes to fund laboratory research, population-based studies, and training programs that are conducted at universities, hospitals, businesses and organizations around the country and in other lands.

**Environmental Health Perspectives.** NIEHS is also the publisher of Environmental Health Perspectives (EHP), a monthly journal of peer-reviewed research and news. With an impact factor of 6.12, EHP is the top monthly journal in public, environmental, and occupational health, and the second-ranked monthly journal in environmental sciences. All EHP content is free online at <http://ehp03.niehs.nih.gov>.

PO BOX 12233 • Research Triangle Park, NC 27709  
Phone: 919.541.1919 • <http://www.niehs.nih.gov>  
♻️ Printed on recycled paper • February 2010



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
National Institutes of Health

## Example #1: Global Climate Change

- Discuss NIEHS integrated approach across the institute to address GCC.
- Focus on environmental public health
- Cross-agency white paper, “A Human Health Perspective on Climate Change.”



## Example #2: Endocrine Disruptors

- bisphenol A (BPA) “GO” Program
- NTP’s Center for the Evaluation of Reproductive Health Risks (CERHR)
- ERKO mice
- Uterine Fibroids



## Example #3: PEPH

- Example of providing focus and coordination across DERT
- Building bridges with others across the Institute
- Clear ties to new NIEHS team members in Bethesda



## NIEHS Stakeholders

- Community Residents and Organizations
- Researchers
- Educators
- Healthcare and Public Health Professionals
- Policy makers
- Industry



Clip from [k8science.org](http://k8science.org) and [bioedonline.org](http://bioedonline.org)

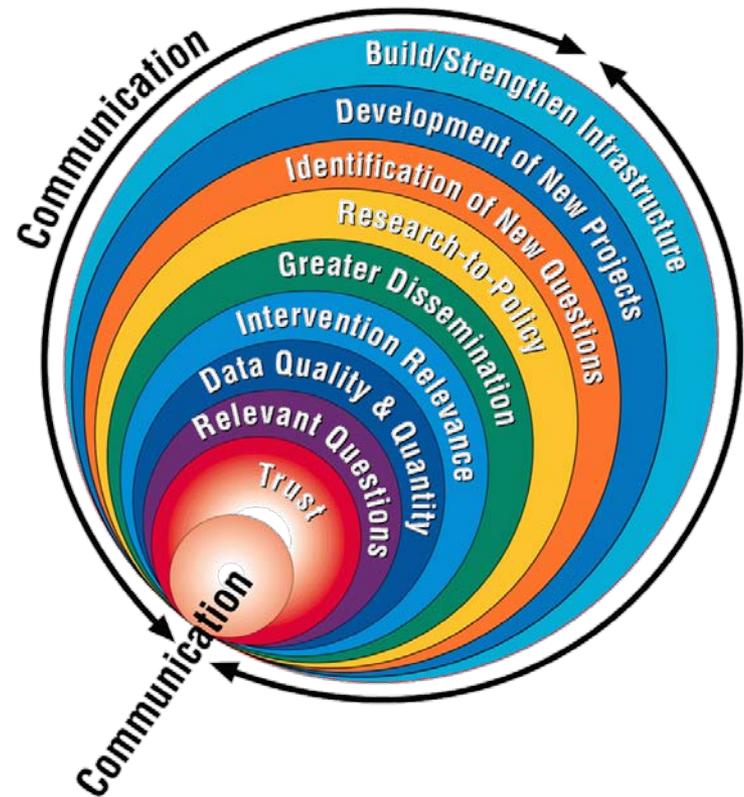


Photos by Ann Backus



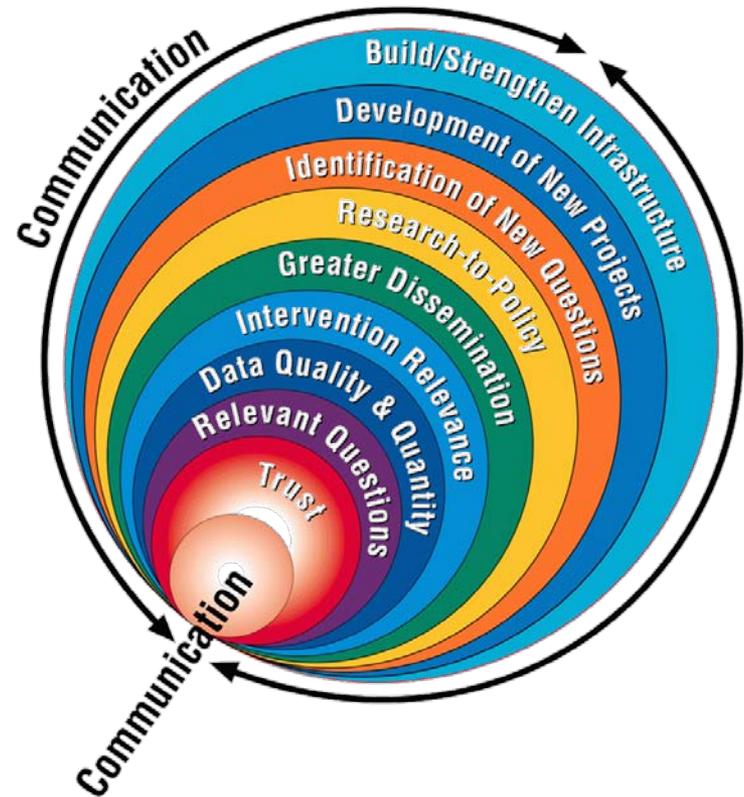
CAT members giving testimony at City Council Meeting

# Achieving Our Public Health Vision – Stakeholder Input!



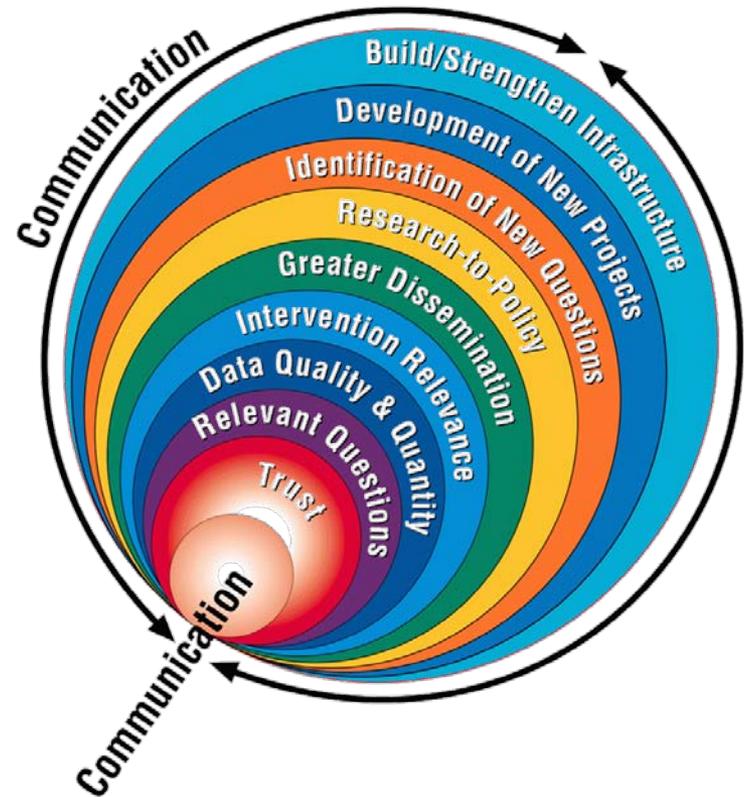
# Achieving Our Public Health Vision – Stakeholder Input!

- NIEHS Partners



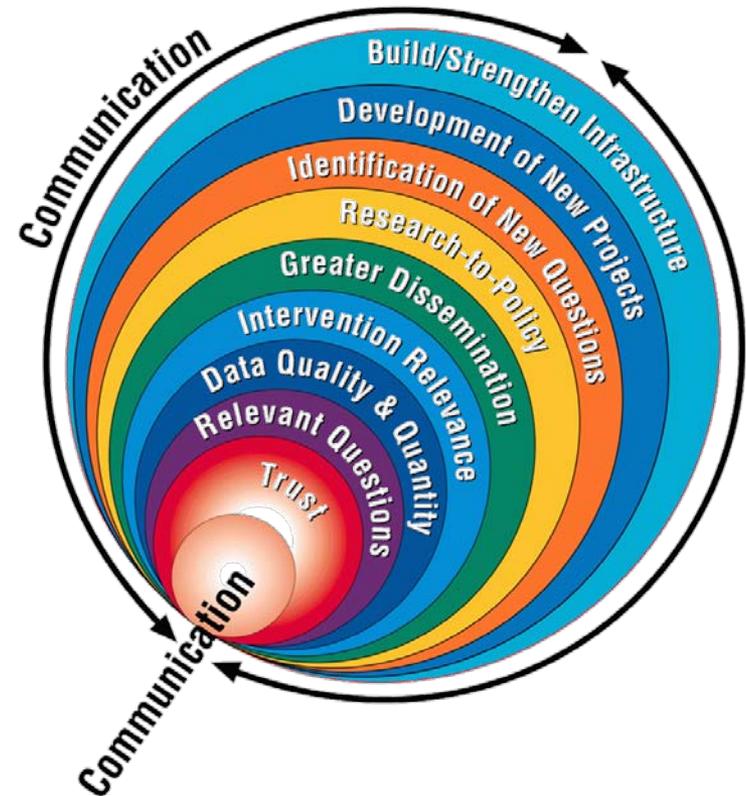
# Achieving Our Public Health Vision – Stakeholder Input!

- NIEHS Partners
- Community Forums



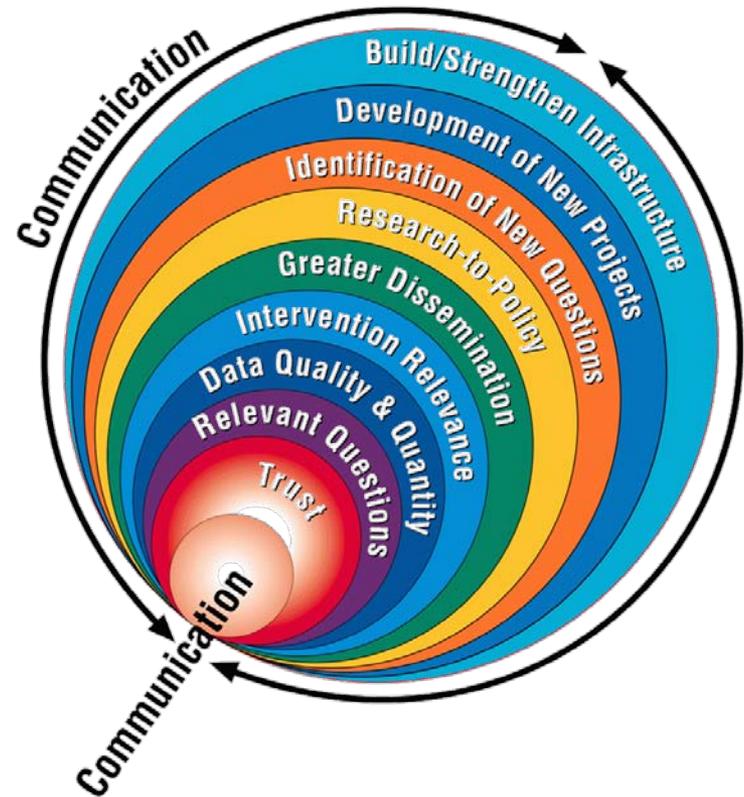
## Achieving Our Public Health Vision – Stakeholder Input!

- NIEHS Partners
- Community Forums
- NIEHS Advisory Council



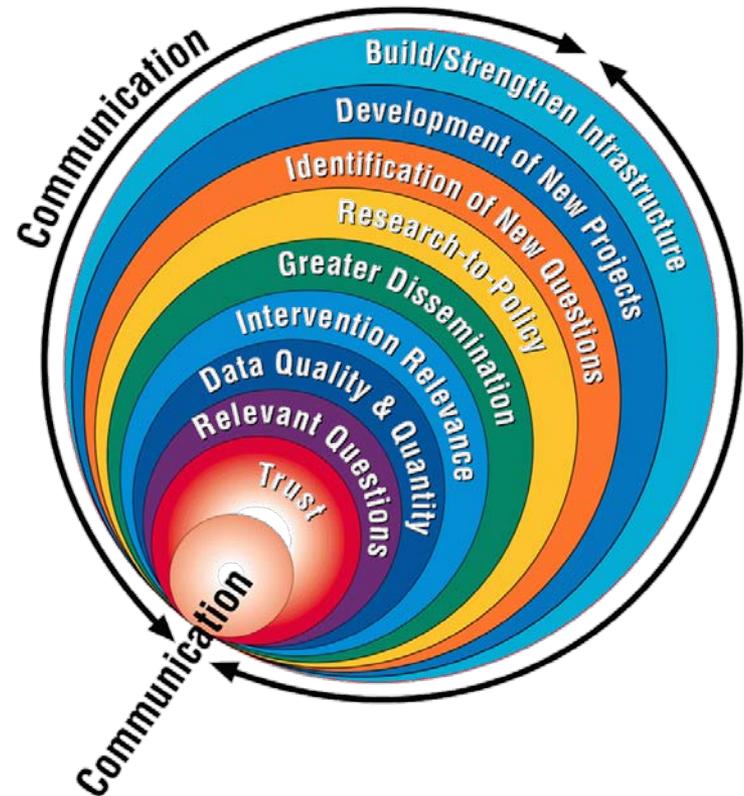
## Achieving Our Public Health Vision – Stakeholder Input!

- NIEHS Partners
- Community Forums
- NIEHS Advisory Council
- Public-Private partnerships



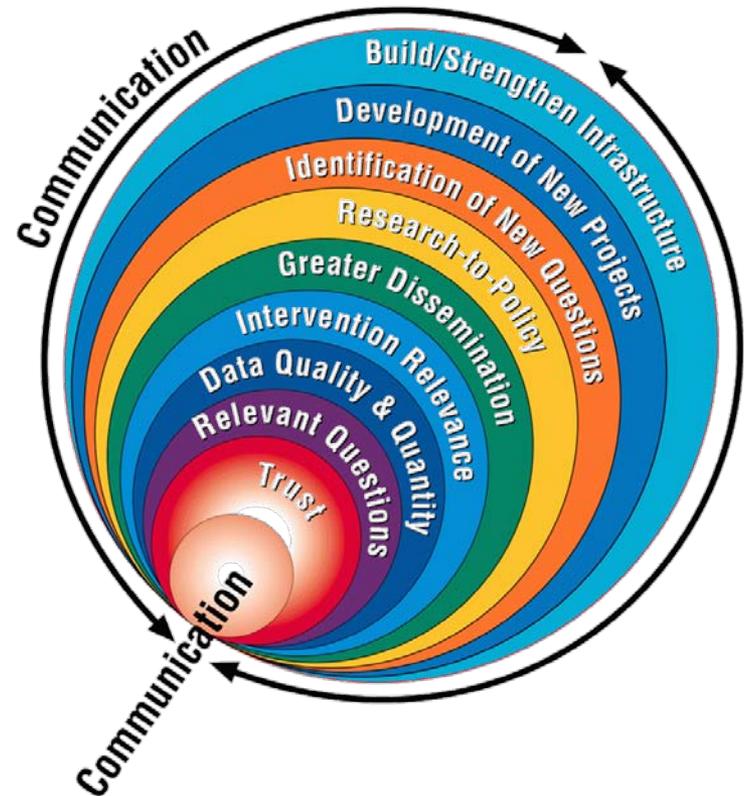
## Achieving Our Public Health Vision – Stakeholder Input!

- NIEHS Partners
- Community Forums
- NIEHS Advisory Council
- Public-Private partnerships
- Trans-NIH collaborations



## Achieving Our Public Health Vision – Stakeholder Input!

- NIEHS Partners
- Community Forums
- NIEHS Advisory Council
- Public-Private partnerships
- Trans-NIH collaborations
- Cross Agency partnerships



# Building the Capacity of the Next Generation

- All Partners!
- Training
- Fellowships



## Dr. Collins' NIH Research Priorities

- High-throughput technologies
- Translational Medicine
- Benefiting health care reform:  
comparative effectiveness research;  
prevention and personalized medicine;  
health disparities research;  
pharmacogenomics; health research economics
- Focus more on global health
- Reinvigorate, empower biomedical research community



# Promoting Interactions for Environmental Public Health

- Break down the silos
- Learn from one another
- Build networks across the programs
- Recognize that these two days are just the first step
- Good luck!

# Thank you!



National Toxicology Program  
U.S. Department of Health and Human Services

