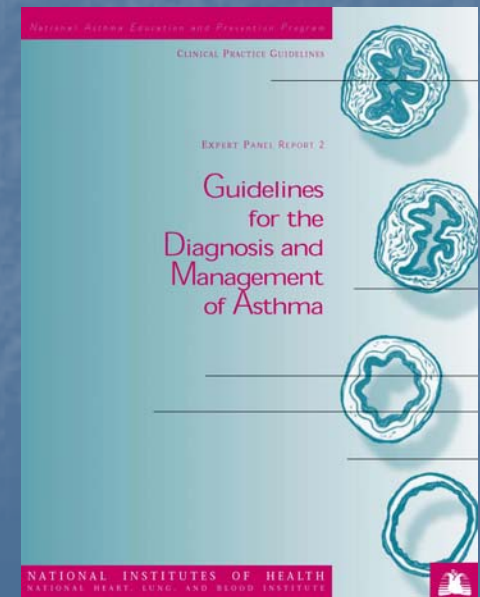


# Best Practices for Asthma Management: NAEPP/NHLBI Guidelines

1. Lung function measurement
  2. Comprehensive pharmacologic therapy
  3. Control of environmental triggers
  4. Patient education that fosters a clinician/patient partnership
- Less headway made on #3 & #4



# Environmental Triggers in the Home

## ■ Allergens

- Cat & Dog Dander
- Mice & Cockroaches
- Dust mites
- Molds
- Outdoor allergens

## ■ Irritants

- ETS
- Indoor/outdoor fumes
- Wood-burning stoves
- Cleaning agents
- Fragrances

# Interventions for Asthma: Range of Intensities

	←Low →		← Medium →		←High →
Education addressing environmental triggers, in clinic or on phone	Smoking cessation services	Referrals to other programs and resources	Education addressing environmental triggers, in home	In-home environmental assessment	Structural remediation
EPA air purifier; dust mite-proof mattress and pillow covers-			Additional environmental supplies and remediation activities (e.g., IPM)		→

# Effectiveness of Asthma Education & Environmental Interventions on Health Outcomes

- Across risk levels
  - Increased symptom free days & other quality of life measures
  - Improved lung function
  - Reduced use of rescue medications

# Challenges to Delivering Asthma Education

- Disease highly complex, requiring tailored education & interventions
- Time in standard office or sick visit insufficient
- Limited coverage for discrete asthma education visits
- Range of providers not reimbursed



# Challenges to Delivering Environmental Interventions

- Evidence of health effectiveness just emerging
- Environmental interventions considered beyond the scope of medical care
- Lack of trained providers of services & quality assurance
- Lack of awareness among clinicians
- Lack of evidence regarding cost-effectiveness

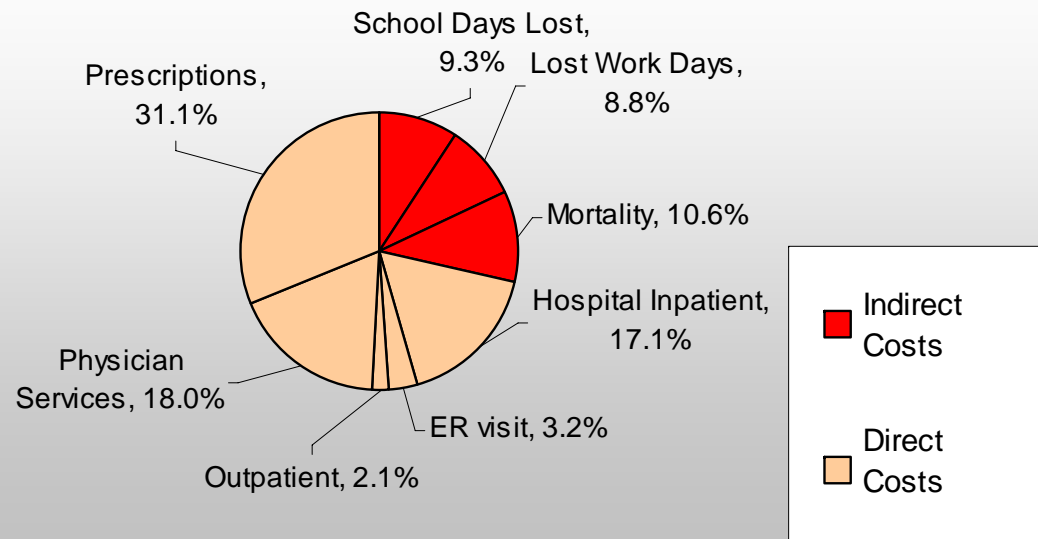


# Who is Currently Paying?

- Federal Grants
- State & Local Health Departments
- Some Private Foundations
- Some Health Plans (clinic-based education)

# Why Should the Health Sector Care?

Figure 1: Distribution of Asthma Costs in the US (2004):  
\$16.1 Billion in Total Costs



- Nationally: Asthma costs over \$16 billion in direct & indirect expenses
- Over 70% of costs born by the health sector
- Many costs preventable



# Establishing a Business Case for Health Care Decision-making

- Are there cost savings?
  - Savings from reduced health expenditures exceed the cost of the program
- Is there cost-effectiveness?
  - Investments in a new service are reasonable for a given health outcome

# Primary Findings

- The health sector stands to benefit from investing in asthma education & environmental interventions
  - Education
    - Services targeted to high risk patients realize **cost-savings**
  - Home-based environmental interventions
    - Assessment, services & supplies targeted to high risk patients are **cost-effective**