

# Investment in research saves lives and money

The medical and health research policy program of the Mary Woodard Lasker Charitable Trust  
www.fundingfirst.org  
www.laskerfoundation.org

facts about:

## Flu

Influenza (flu) is caused by a virus. Flu is more severe than the common cold, keeps people from their normal activities for up to a week, and can be complicated by bacterial infections, such as pneumonia.

### Today:

- Flu and pneumonia together are the seventh leading cause of death in America.
- More people die of complications from the flu than from any other vaccine-preventable disease.
- In the United States, approximately 25 percent of the population develops flu-associated illnesses each year, resulting in more than 65,000 deaths in 2002.
- More than 200,000 Americans are hospitalized each year because of flu.

SOURCE: AMERICAN LUNG ASSOCIATION (WWW.LUNGUSA.ORG)  
CENTERS FOR DISEASE CONTROL AND PREVENTION (WWW.CDC.GOV)  
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES, NATIONAL INSTITUTES OF HEALTH (WWW.NIAID.NIH.GOV)

SAVING LIVES  
SAVING MONEY

### HOW RESEARCH SAVES LIVES:

- The flu vaccine can prevent 60 percent of hospitalizations and 80 percent of deaths from flu-related complications among the elderly.
- Newly developed antiviral drugs help to prevent and reduce the severity of infection by the most common strains of flu in the U.S.

SOURCE: NATIONAL CENTER FOR HEALTH STATISTICS, CDC  
NATIONAL COALITION FOR ADULT IMMUNIZATION (WWW.NFID.ORG/NCAI)  
NATIONAL INSTITUTES OF HEALTH

### HOW RESEARCH SAVES MONEY:

- Flu vaccination has resulted in up to 44 percent fewer physician visits, 45 percent fewer lost work days, and 25 percent less antibiotic use for flu-associated illnesses in adults under the age of 65.
- Recent research shows that vaccinating healthy, employed adults (ages 18 to 50) against the flu is always cost-effective. As much as \$31 per person immunized could be saved according to this NIH-funded study.

SOURCE: BRIDGES, C.B., ET AL. MORBIDITY AND MORTALITY WEEKLY REPORT 2003;52(RR08):1-36.  
LEE, P.Y., ET AL. ANNALS OF INTERNAL MEDICINE, 2002, 137: 226-231.

*"If you think research is expensive, try disease."*

— Mary Lasker 1901–1994

### The Cost:

- Without large-scale immunization, a flu pandemic in the U.S. is projected to cost as much as \$167 billion in hospital bills, medications, work and school days lost and deaths.\*
- An estimated 220,000 years of potential life (before age 75) were lost in 2002 to influenza and pneumonia.

SOURCE: \*MELTZER, M.I. ET AL. EMERGING INFECTIOUS DISEASES, 1999, 5(5): 659-671.  
NATIONAL CENTER FOR HEALTH STATISTICS, CDC  
UNITED STATES CENSUS BUREAU (WWW.CENSUS.GOV)

## survivor



NAME: ZELDA MITCHELL

AGE: 78

DISEASE: FLU

Zelda Mitchell of Guthrie, Oklahoma, never took the flu shot. Instead, at age 75, she fell ill with flu that developed into pneumonia and caused her to be hospitalized for three days. "Since then, I get my flu shot every year as soon as it becomes available."

Zelda remembers family stories of the great flu epidemic of 1918 that killed 20 to 40 million people. Flu was poorly understood, and no vaccine or treatment existed. Zelda's great uncle was the only family member unaffected in his household, and he had to care for his entire family. "He was the only one—and it was a large family," she recalled. "It was a bad time."

In good health at age 78, Zelda stays active and leads a healthy lifestyle. Zelda marvels at the research that produced the drugs that manage her asthma, saved her from pneumonia, and now prevent her from getting flu every year. Children, people over 65 years of age, health care workers, and people with chronic health conditions are more vulnerable to flu and are encouraged by the CDC to get the flu vaccine. Now, every year, Zelda is first in line for it.

# facts about: } Flu

## Hope for the Future:

- Each year about one in three children develops the flu. A nasal mist flu vaccine (FluMist) was available for the first time in 2003 and will expand vaccination options for healthy children and adults. Clinical testing sponsored by the NIH found the vaccine to be 87 percent effective for children five and up.
- The bird flu can infect people and has the potential to spread quickly through human populations. Researchers sponsored by the NIH developed a vaccine against a specific strain of the bird flu and are testing its effectiveness in human clinical trials. This and other experimental bird flu vaccines could prevent a flu pandemic.

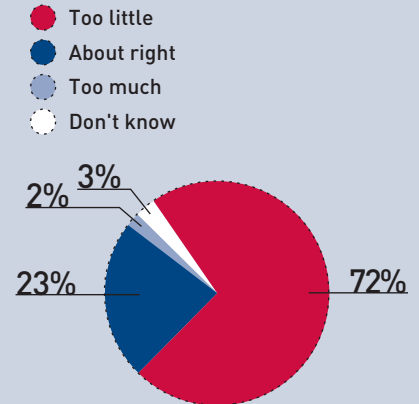
SOURCE: NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES, NIH  
FOOD AND DRUG ADMINISTRATION (WWW.FDA.GOV)

## The Bottom Line:

*As the U.S. population ages and more people live for years with chronic diseases, increasing numbers of Americans will be vulnerable to the life-threatening effects of the flu. More research is needed to produce cost-effective vaccines and antiviral medications.*

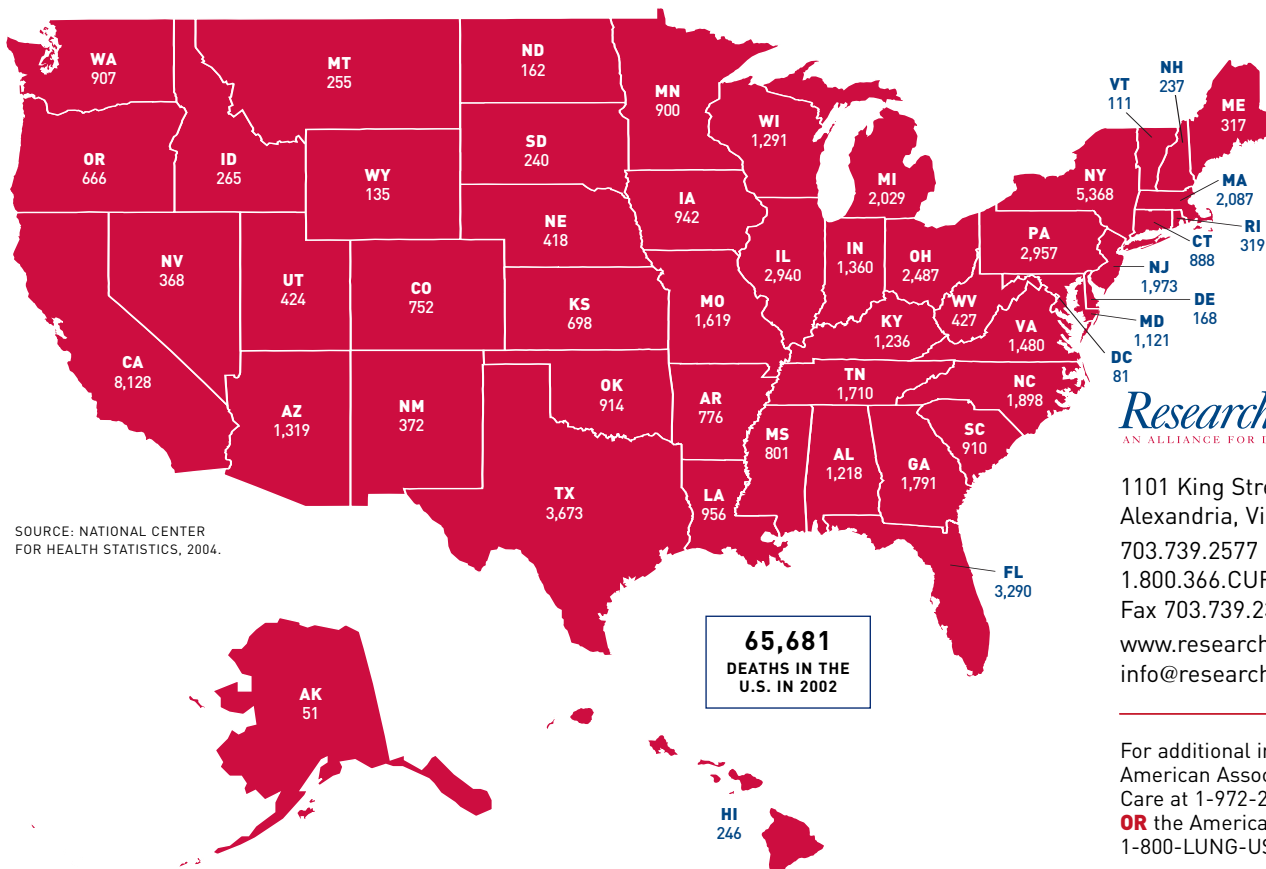
### More should be spent on prevention research

*Currently the U.S. spends about one cent of every health care dollar on prevention research. Do you think this is too much, too little or about right?*



SOURCE: AGGREGATE 2003, HARRIS INTERACTIVE FOR RESEARCH!AMERICA

## Number of Deaths from Influenza and Pneumonia, 2002



SOURCE: NATIONAL CENTER FOR HEALTH STATISTICS, 2004.

**Research!America**  
AN ALLIANCE FOR DISCOVERIES IN HEALTH®

1101 King Street, Suite 520  
Alexandria, Virginia 22314  
703.739.2577  
1.800.366.CURE  
Fax 703.739.2372  
www.researchamerica.org  
info@researchamerica.org

For additional information contact the American Association for Respiratory Care at 1-972-243-2272; www.aarc.org  
**OR** the American Lung Association at 1-800-LUNG-USA; www.lungusa.org.