

Health Begins at Home

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National Center for Environmental Health
Healthy Homes and Lead Poisoning Prevention Branch



What is Healthy Homes?

- *Healthy Homes is sited, designed, built, maintained, and renovated in ways that support the health of its occupants.*

Housing Conditions Have an Important Impact on Public Health

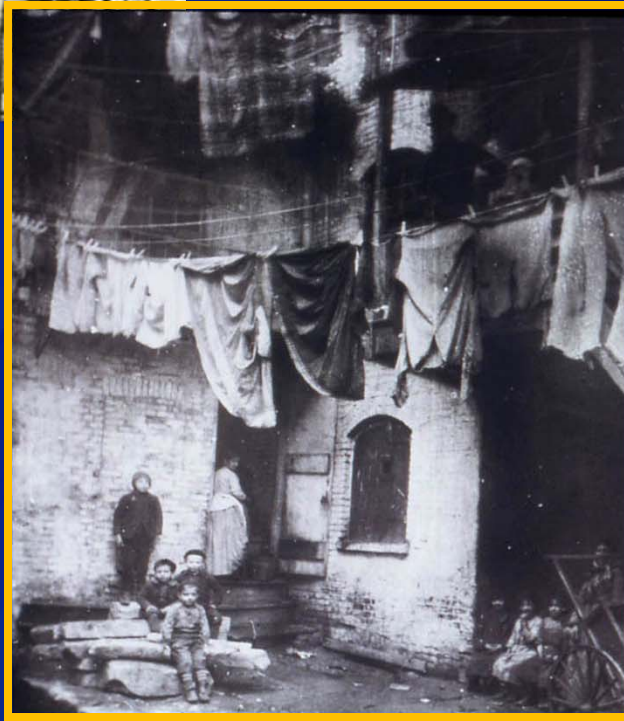


Most people spend an average of 50%
or more of every day inside their
homes



“The connection between health and the dwelling of the population is one of the **most** important that exists”.

Florence Nightingale



Cited in Lowry, S. BMJ, 1991, 303, 838-840

More Than 6 Million Substandard Housing Units Nationwide

- ❑ Residents are at increased risk for exposure to lead, carbon monoxide, mold, cockroaches, dust mites, pesticide residues, tobacco smoke, combustion gases, and radon, rat bites, and falls



More Than 6 Million Substandard Housing Units Nationwide

- ❑ Children in these units are more likely to have elevated blood lead levels and diagnosed with asthma.
- ❑ Children, the elderly, African Americans, American Indians, and the poorest Americans are at greatest risk for fire-related injuries and deaths.



Substandard Housing Units (continued)

- ❑ Critical need to prevent the public health problems that stem from these units
- ❑ Healthy People 2020 goal calls for a ~ 20% reduction in housing with moderate or severe physical problems



Improving Safety in the Home

INJURY

18,000 unintentional injury deaths/year occur in the home

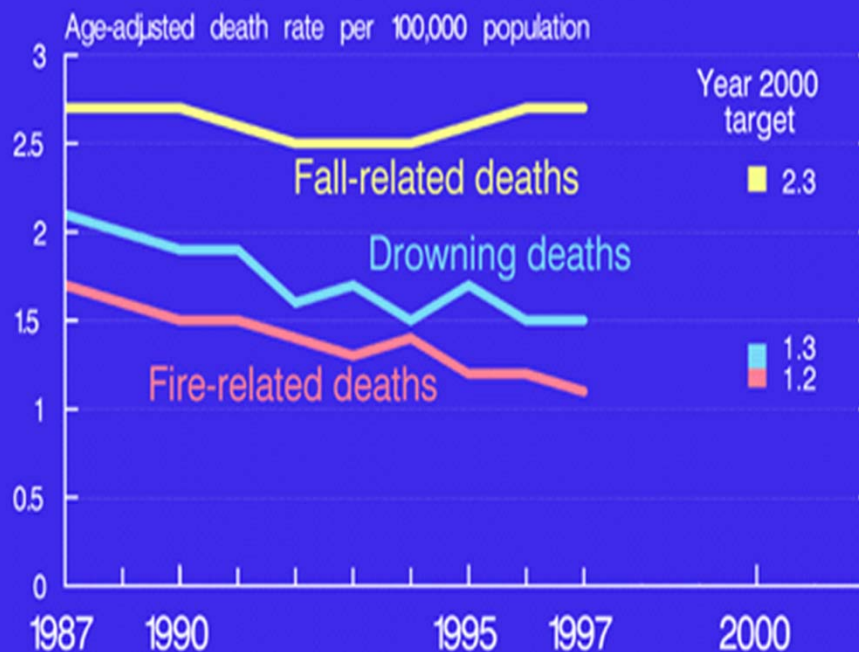
FIRES

~400,000 residential fires/year result in ~ \$7 billion in property damage, 3,000 deaths, and 14,000 injuries

PREPAREDNESS

Only 43% of households on the Atlantic Ocean or Gulf coast believe they are vulnerable to hurricanes.

Home and Leisure Deaths



SOURCE: CDC/NCHS, National Vital Statistics System, 1987-97

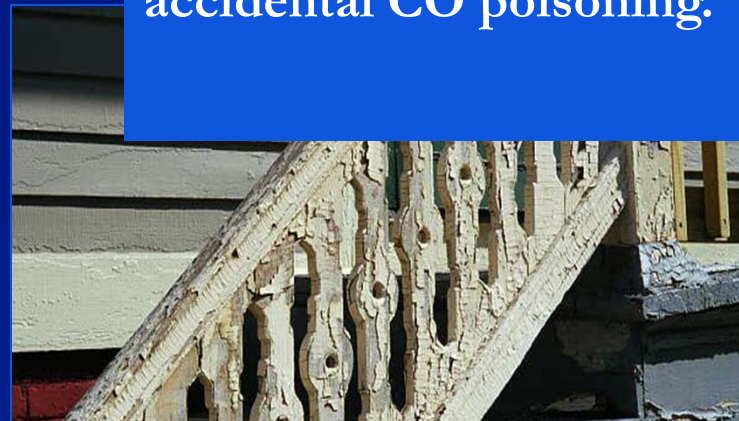
Addressing Environmental Features that Affect Health

CHEMICAL CONTAMINANTS-

47% of households in the US with children under 5 years old had a pesticide stored in an unlocked cabinet within reach of a child



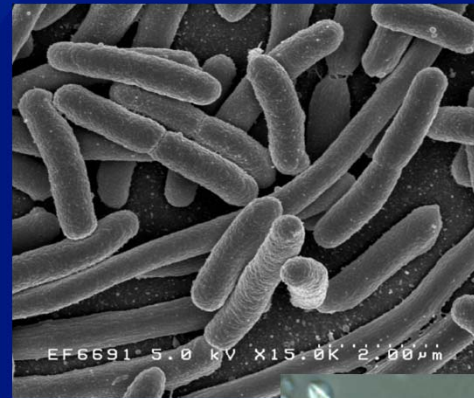
Each year, more than 500 people in the US die from accidental CO poisoning.



1.2 million housing units with lead-based paint house low-income families with children.

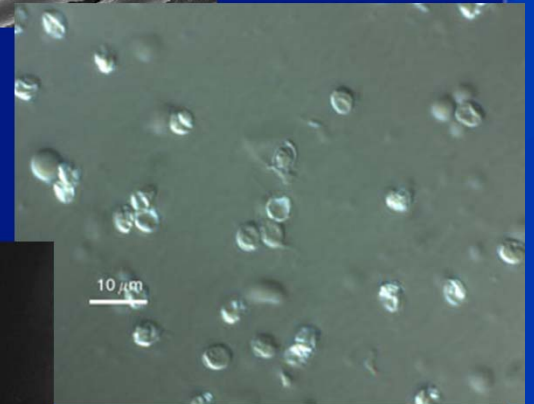
Addressing Biological Contaminates that Affect Health

In 1999 and 2000, 43% of all drinking water disease outbreaks were associated with small, unregulated community water systems and private wells. 45 million people in the US use unregulated water.



Escherichia
Coli

Pseudomonas



Giardia

Addressing Housing Characteristics that Affect Health

Inadequate Ventilation

Radon, found in indoor air, causes ~ 21,000 cases of lung cancer/ year.

Secondhand Smoke

More than 13 million children are exposed to tobacco smoke at home.

Dampness

Mold and moisture aggravates pre-existing respiratory conditions such as asthma .

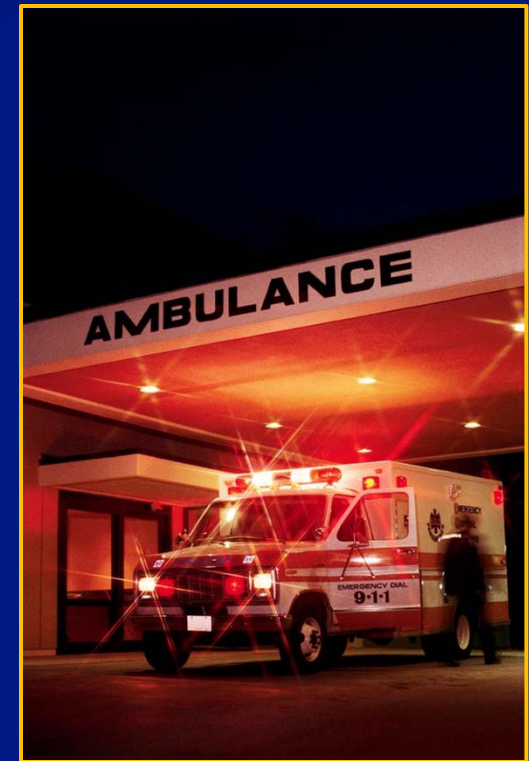
Pests

Rodents transmit disease directly and can also be the source of allergens that exacerbate asthma.



Health Care and Productivity Costs for Illnesses and Injuries

- ❑ Asthma: \$18.3 billion a year
- ❑ Burns: \$7.5 billion a year
- ❑ Childhood Lead Poisoning: \$2,552 for each 1 $\mu\text{g}/\text{dL}$ increase in blood lead level
- ❑ Falls (in 2000): \$81 billion in lifetime costs
- ❑ Depression: \$83.1 billion in lifetime costs



The Surgeon General's
Call To Action On Healthy Homes

2009



U.S. Department of Health and Human Services

The *Call to Action* describes the steps people can take now to protect themselves from disease, disability, and injury that may result from health hazards in their homes.

Surgeon General's Healthy Homes Goals:

1. Take actions to ensure that all Americans have access to healthy, safe, and affordable housing
2. Increase public awareness by creating a national dialogue on healthy housing and by promoting health literacy about housing
3. Invest in research that increases our understanding of the long-term economic benefits of healthy housing
4. Translate Healthy Homes Research into Practice and Policy



Elements of a Healthy Home

Keep it Dry



Keep it Free of Contaminants



Keep it Clean



Keep it Pest Free



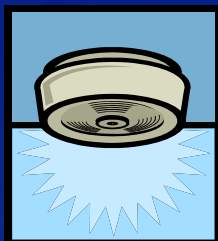
Keep it Well Ventilated



Keep it Well Maintained



Keep it Safe



Keep it Accessible



CDC's Healthy Homes Program



CDC's Healthy Homes Program is a coordinated, comprehensive, and holistic approach to preventing diseases and injuries that result from housing-related hazards and deficiencies.

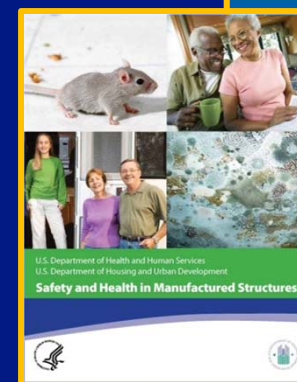
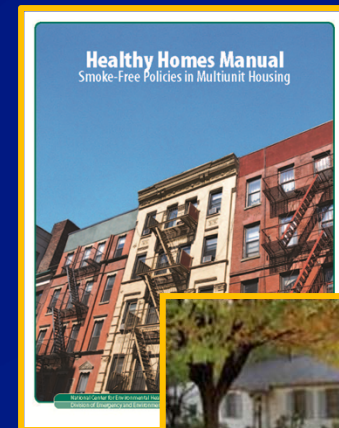
CDC's Healthy Homes & Lead Poisoning Prevention Program

- ❑ **Vision:** All people are healthier because they live in healthy homes
- ❑ **Mission:** Homes are healthier because CDC advances knowledge and ensures there are resources; such as, partnerships, programs, and policies necessary to create and sustain healthy homes.

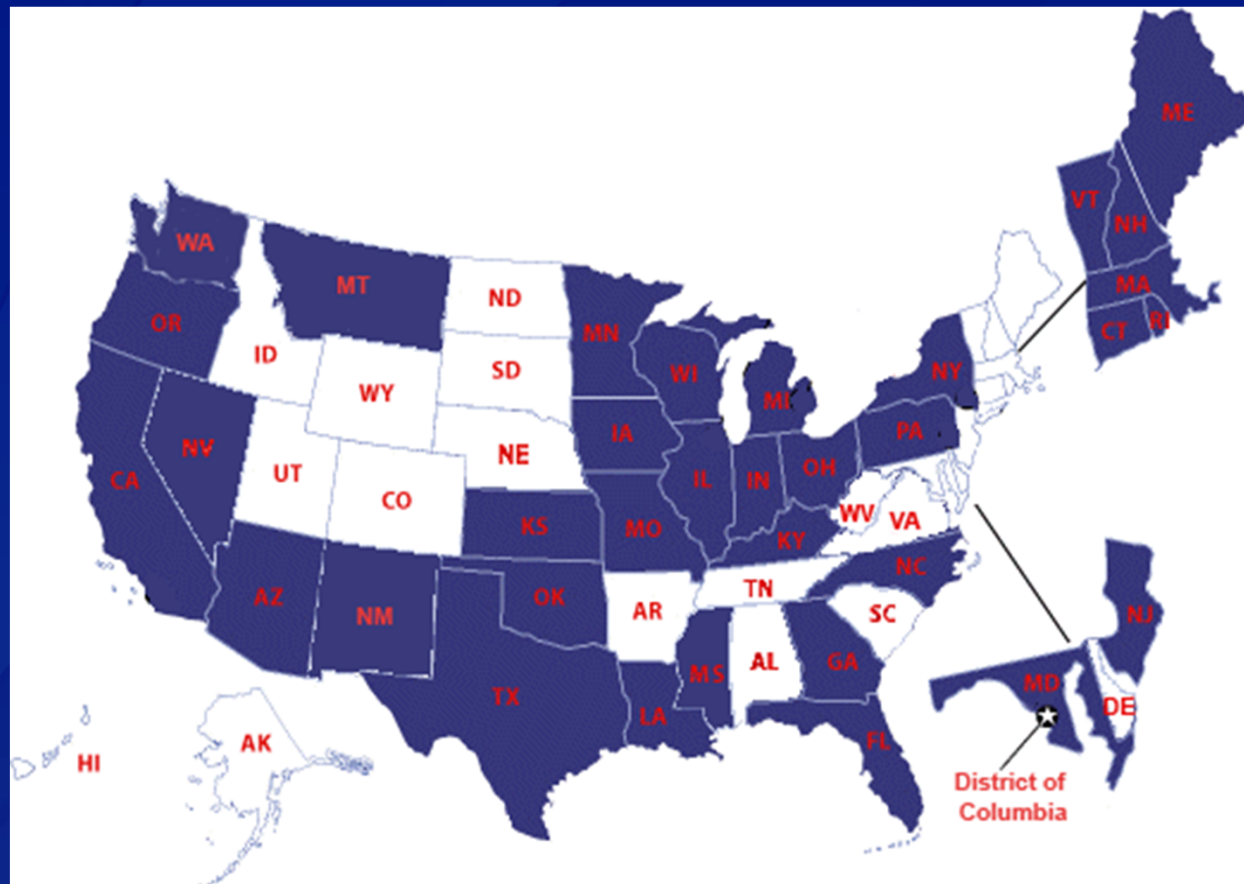


Healthy Homes & Lead Poisoning Program Activities:

- ❑ Funding State Health Departments
- ❑ Developing Guidance Documents
- ❑ Providing Training
- ❑ Improving Surveillance
- ❑ Conducting Research



2011-2014 Healthy Homes & Lead Poisoning Prevention Funded States



CDC Healthy Homes Resources

- ❑ www.cdc.gov/healthyhomes
- ❑ Healthy Homes & Lead Poisoning Training Center
- ❑ www.healthyhomes.gov



www.cdc.gov/healthyhomes

Healthy Homes Manual

Smoke-Free Policies in Multiunit Housing



National Center for Environmental Health
Division of Emergency and Environmental Health Services





U.S. Department of Health and Human Services
U.S. Department of Housing and Urban Development

Safety and Health in Manufactured Structures



New Healthy Homes DVD



Healthy Homes & Lead Poisoning Surveillance System (HHLPSS)

- Web Based – state and locals access same database
- Virtually unlimited capacity
- Address verification and geo-coding
- Improved/faster reporting
- Improved more detail methods for tracking non-paint sources
- More drop down list with fewer free text fields
- Ability to import HL7 ELRs
- Ability to track healthy housing variables

HHLPSS Timeline

- Developed in-house by Emergint Technologies Inc
- Beta testing was completed from September 2009 through January 2010
- Deployment to 18 state and local health departments
- Currently being tested with production expected over the next 2 months.

Federal Interagency Working Group

❑ Federal Interagency Taskforce:

- Centers for Disease Control
- Environmental Protection Agency
- Housing & Urban Development

❑ Federal Healthy Homes Working Group

Strategic Partnerships

- Local Health
- Local Housing
- Advocates/Foundation
- HUD
- EPA
- DOE
- CDC
- Health Plans
- Legislators



Department of Health and Human Services
Centers for Disease Control and Prevention



Thank You!

**For More Information:
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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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