



- Children exposed to secondhand smoke are at an increased risk of sudden infant death syndrome (SIDS), ear infections, colds, pneumonia, bronchitis, and more severe asthma.

- In 2004, the Institute of Medicine published the report "Damp Indoor Spaces & Health." The report identified adverse health effects related to damp indoor environments and the presence of mold. Some of these health effects included upper respiratory tract symptoms, coughing, wheezing, asthma symptoms, hypersensitivity pneumonitis etc.

### References

1. Web-based Injury Statistics Query and Reporting System. National Center for Injury Prevention and Control Centers for Disease Control and Prevention. Available at <http://cdc.gov/ncipc/wisqars>. Accessed on May 11, 2009.
2. Halterman JS, Aligne CA, Auinger P, McBride JT, Szilagyi PG. Health and health care for high-risk children and adolescents: Inadequate therapy for asthma among children in the United States. *Pediatrics*, 2000; 105(1). URL <http://pediatrics.aappublications.org/cgi/content/full/105/1/S2/272>
3. Akinbami LJ. Asthma Prevalence, Health Care Use and Mortality: United States, 2003-2005. National Center for Health Statistics, 2006. Available at <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/asthma03-05/asthma03-05.htm> Accessed on May 11, 2009.
4. Fast facts on Children's Environmental Health. U.S. Environmental Protection Agency. Available at <http://yosemite.epa.gov/ochp/ochpweb.nsf/content/fastfacts.htm>. Accessed on May 11, 2009
5. Centers for Disease Control and Prevention. Blood Lead Levels: United States, 1999-2002. *MMWR Morb Mortal Wkly Rep*. 2005;54:513-515
6. President's Task Force on Environmental Health Risks and Safety Risks to Children. *Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards*. Washington, DC: Government Printing Office; 2000
7. US National Institutes of Health. National Cancer Institute. Factsheet, Radon and Cancer: Questions and Answers. July 2004. Available at: <http://www.cancer.gov/cancertopics/factsheet/Risk/radon>. Accessed on May 11, 2009.
8. Unintentional Carbon Monoxide Poisoning Deaths. Injury Prevention Service, Oklahoma State Department of Health.. Available at [http://www.ok.gov/health/documents/Carbon\\_Monoxide.pdf](http://www.ok.gov/health/documents/Carbon_Monoxide.pdf). Accessed on May 11, 2009.
9. American Lung Association. State of Tobacco Control Fact Sheet 2002
10. Asthma Surveillance Report Oklahoma, 2006. Available at <http://www.ok.gov/health/documents/Asthma%20Report%2006%20final.pdf>. Accessed on May 11, 2009.



The connection between health and the dwelling of the population is one of the most important that exists - *Florence Nightingale*

### What is a Healthy Homes Initiative?

The Healthy Homes Initiative is a comprehensive approach to address a broad range of housing deficiencies and hazards in coordinated fashion rather than taking a categorical approach to health and safety hazards in the home even in the presence of multiple issues.



### Oklahoma's Healthy Homes for Healthy Families

### Why Healthy Homes are Important?

Scientific evidence suggests that health and environmental problems such as childhood lead poisoning, unintentional injuries, respiratory problems (asthma etc), poor indoor air quality issues as carbon monoxide poisoning, radon, secondhand smoke, mold and moisture are linked to preventable housing deficiencies in over 6 million substandard housing units.

Creating healthier and safer housing has the potential to save billions nationwide in health care costs and prevent the public health problems that arise from substandard and unsafe housing.

### Facts About Housing Related Hazards

#### Unintentional Injuries (1999-2005)

- Unintentional injuries (falls, poisonings, suffocations, fires and burns etc) were the leading cause of death in the U.S. and Oklahoma for persons in the age group of 1-44 years. They are also the leading cause of years of potential life lost (YPLL) before age 65 years in the U.S. and Oklahoma. Most of these injuries tend to occur at home and are completely preventable.<sup>1</sup>

- During 1999-2005, 1,119,781 Americans died from an injury and unintentional injuries accounted for 743,137 (66.4%) deaths. During the same time period, 17,585 Oklahomans died from an injury and unintentional injuries accounted for 12,155 (69.1%) deaths.<sup>1</sup>





- Suffocation was the leading cause of all unintentional injury deaths in children <1 year of age in the U.S. and Oklahoma.<sup>1</sup>

- Fires and burns were the 3<sup>rd</sup> leading cause of all unintentional injury deaths in children between 1-14 years of age in the U.S. and Oklahoma. Poisoning was the 2<sup>nd</sup> and falls were the 3<sup>rd</sup> leading cause of all unintentional injury deaths for all ages in the U.S. and Oklahoma.<sup>1</sup>

- 5,201 children nationwide in the age group of 1-14 died from an injury and unintentional injuries accounted for 4,079 (78.4%) deaths. During the same time period, 102 children within Oklahoma in the age group of 1-14 died from an injury and unintentional injuries accounted for 80 (78.4%) deaths.<sup>1</sup>

#### Asthma and its Economic Burden

- Asthma is the most prevalent chronic condition among children.<sup>2</sup>

- In 2000, the Institute of Medicine published the report, "Clearing the Air." The report associates indoor environmental agents such as dust mites, roaches, cats, dogs, mold, and environmental tobacco smoke with the development and exacerbation of asthma.

- According to the latest National Center for Health Statistics (NCHS) data, 2003-2005, an estimated 8.9% of children (6.5 million) and 7.2% of adults (15.7 million) currently have asthma.

- According to the 2006 Behavioral Risk Factor Surveillance System (BRFSS) results, 9.2% (78,500) Oklahoma children and 8.5% (229,000) adults reported that they currently have asthma.

- During 2000-2004, an average of 4,185 deaths from asthma occurred annually in the U.S. In 2005, 56 Oklahomans died from asthma.

- Among children ages 5-17 years, asthma is the leading cause of school absences from a chronic illness. In 2003, it accounted for an annual loss of 12.8 million school days. In 2003, asthma accounted for 10.1 million missed workdays among working adults ages 18 and over.<sup>3</sup>

- In 2007, annual expenditure for medical care and lost productivity due to asthma was estimated to be \$19.7 billion. Overall, asthma contributes to approximately 3% of total health care costs.<sup>4</sup>

#### Childhood Lead Poisoning

- Lead based paint hazards are present in 24 million U.S. homes and low-income families with young



children occupy 1.2 million of these homes.<sup>5</sup>

- During 2004-2006, there were 9,233,337 U.S. children younger than 6 years of age tested for lead poisoning and 139,355 (1.5%) children were found to have elevated blood lead levels (EBLLs). During 2004-2006, there were 67,052 Oklahoma children younger than 6 years of age tested for lead poisoning and 567 (0.8%) children were found to have EBLLs.

- According to the Centers for Disease Control & Prevention (CDC), approximately 310,000 U.S. children less than 6 years of age have EBLLs greater than or equal to 10 µg /dL.<sup>5</sup>

- A child is estimated to lose 2 IQ points for each 10 µg /dL increase in blood lead level. Cognitive ability is reduced, on average, by about one-quarter IQ point for every 1 µg /dL increase in childhood blood lead. A reduction of one IQ point reduces lifetime earnings, on average, by about \$9,600.<sup>6</sup>

- According to the U.S. Environmental Protection Agency (EPA), childhood lead poisoning between 2000-2010 is estimated to cost the nation \$22 billion in forgone earnings.<sup>4</sup>

#### Poor Indoor Air Quality

- According to the EPA, poor indoor air quality is the 4th leading environmental threat nationwide.

- According to the EPA, radon is the leading cause of lung cancer among non-smokers and the second leading cause of lung cancer in the U.S., responsible for 21,000 deaths every year.<sup>7</sup>

- Every year, carbon monoxide (CO) poisoning accounts for more than 500 deaths and approximately 15,000 hospital emergency departments visits.<sup>8</sup>

- In Oklahoma, between 1994 and 2003, 291 (29 every year) CO related deaths occurred. 47% of all CO poisoning deaths occurred from a source inside the home.<sup>8</sup>

- According to the EPA and the American Lung Association, every year approximately 53,800 Americans die from secondhand smoke.<sup>9</sup> In Oklahoma, 700 people die every year from secondhand smoke.<sup>10</sup>

- The EPA, the U.S. National Toxicology Program (NTP), the U.S. Surgeon General, and the International Agency for Research on Cancer (IARC) have classified secondhand smoke as a known human carcinogen (cancer-causing agent).