

Illinois Department of Public Health Tobacco Burden in Illinois 2005

The health and economic impact of cigarette smoking includes increased risks for chronic disease, diminished productivity and premature death. This report describes the health and economic toll of cigarette smoking in Illinois.

Smoking Prevalence

- During 2002, 22.8 percent of adults were current smokers; there were more male smokers (26.1 percent) than female smokers (19.8 percent).¹ (Table 1)
- Urban counties (25.5 percent) had the highest rates of smoking among adults, followed by rural counties, Chicago and the collar counties. Suburban Cook County (19.4 percent) had the lowest rate.¹ (Table 2)
- During 2001, 12.6 percent of pregnant women smoked during pregnancy.² (Table 1)
- During 2005, 24.8 percent of high school students and 7.5 percent of middle school students were current smokers.³ (Table 3)

Economic Consequences of Cigarette Smoking

- Based on 1998 figures, cigarette smoking is estimated to cost Illinois nearly \$3.2 billion each year for smoking-attributable health care costs.⁴ (Table 4)
- During 2001, cigarette smoking is estimated to have cost Illinois \$4.2 billion in costs due to lost productivity.⁴ (Table 4)
- During 2001, Illinois' estimated Medicaid expenditures for smoking-related causes totaled nearly \$1.4 billion. Illinois' share of the smoking-related Medicaid costs was approximately half, or almost \$690 million. The federal government covered the remaining costs.^{5,6}

Health Consequences of Cigarette Smoking

- During 1997-2001, an average of 16 percent of all deaths per year in Illinois were smoking-attributable.⁴ (Table 5)
- During 1997-2001, an average of 16,939 Illinois residents died each year from smoking-attributable causes, including cancer, heart diseases and respiratory diseases.⁴ (Table 5)
- Of the 16,939 average annual smoking-attributed deaths among Illinois residents during 1997-2001, 6,942 were deaths from malignant neoplasms; 6,006 were cardiovascular disease deaths; and 3,991 were deaths from respiratory diseases attributed to smoking.⁴ (Table 5)
- An average annual total of 10,362 males died from smoking-attributable diseases during 1997-2001. The majority of smoking-attributable deaths among males were from malignant neoplasms, followed by cardiovascular disease and respiratory diseases.⁴ (Table 6)
- An average annual total of 6,577 females died from smoking-attributable disease during 1997-2001. Smoking-attributable deaths among females were equally likely to be from cardiovascular disease or malignant neoplasms, with fewer deaths attributed to respiratory diseases.⁴ (Table 6)
- During 2001, smoking was responsible for 8 percent of births of short gestation or low birth weight, 3 percent of newborn respiratory distress syndrome cases, 4 percent of all other newborn respiratory conditions and 12 percent of sudden infant death syndrome (SIDS) cases.⁴

- During 1997-2001, an average of 236,605 years of potential life were lost per year due to premature death caused by smoking.⁴ This amounts to an average of 14 years of potential life lost per smoking-attributable death.
- During 1997-2001, the majority of the average annual smoking-attributable years of potential life lost were due to malignant neoplasms (104,918), followed by cardiovascular disease (87,220) and respiratory diseases (44,467).⁴

Table 1. Number of Adult Smokers in Illinois

	# of Smokers	Percent Smokers
Number of Adult Smokers (2002) ¹	2,104,640	22.8%
Adult Males (2002) ¹	1,154,195	26.1%
Adult Females (2002) ¹	950,445	19.8%
Smoking During Pregnancy (2001) ²	21,252	12.6%

Table 2. Adult Smoking Prevalence by Strata, 2002¹

Strata	Percent Smokers
Rural	25.1%
Urban*	25.5%
Collar Counties**	20.4%
Chicago	23.2%
Suburban Cook County	19.4%

* Urban counties include Champaign, DeKalb, Kankakee, Kendall, McLean, Macon, Madison, Peoria, Rock Island, Sangamon, St. Clair, Tazewell and Winnebago.

** Collar counties include DuPage, Kane, Lake, McHenry and Will.

Table 3. Youth Smoking Prevalence in Illinois, 2005³

	Percent of Smokers	
	Middle School	High School
Smoking Prevalence	7.5%	24.8%
Demographics		
Sex		
Female	8.1%	26.8%
Male	6.8%	22.8%
Race/Ethnicity		
White	6.2%	28.0%
African American	9.5%	17.7%
Hispanic	11.2%	20.0%
Other	15.3%	20.8%

Table 4. Economic Impact of Smoking⁴

		Annual Per Capita
Health Care Expenditures, 1998	\$3.2 Billion	\$258
Lost Productivity, 2001	\$4.2 Billion	\$340
Total Annual Costs	\$7.4 Billion	\$598

- Smoking deaths are among adults age 35 and older; total deaths are among all ages.

Table 5. Health Impact of Cigarette Smoking, 1997-2001

Cause of Death	Average Annual Deaths Due to Smoking	
Cancer ⁴	6,942	
Cardiovascular Disease ⁴	6,006	
Respiratory Disease ⁴	3,991	
All Smoking Deaths⁴	16,939	Percent Total Deaths Due to Smoking
Total Illinois Deaths⁷	105,579	
		16%

- Smoking deaths are among adults age 35 and older; total deaths are among all ages.

Table 6. Average Annual Smoking-Attributable Mortality, 1997-2001⁴

Cause of Death	Male	Female	Total
Malignant Cancers			
Lip, Oral Cavity and Pharynx	161	44	205
Esophagus	308	75	383
Stomach	94	28	122
Pancreas	133	158	291
Larynx	116	27	143
Trachea, Lung, Bronchus	3,441	1,946	5,387
Cervix Uteri	0	25	25
Urinary Bladder	159	49	208
Kidney and Renal Pelvis	123	10	133
Acute Myeloid Leukemia	32	13	45
Sub-total	4,567	2,375	6,942
Cardiovascular Diseases			
Ischemic Heart Disease	2,401	1,435	3,836
Other Heart Disease	548	338	886
Cerebrovascular Disease	363	377	740
Atherosclerosis	55	27	82
Aortic Aneurysm	272	134	406
Other Circulatory Diseases	22	34	56
Sub-total	3,661	2,345	6,006
Respiratory Diseases			
Pneumonia, Influenza	268	198	466
Bronchitis, Emphysema	381	318	699
Chronic Airways Obstruction	1,485	1,341	2,826
Sub-total	2,134	1,857	3,991
Total Smoking Deaths	10,362	6,577	16,939
Total Deaths All Causes⁷	51,328	54,251	105,579
Percent Smoking-Attributable	20%	12%	16%

- Smoking deaths are among adults age 35 and older; total deaths are among all ages.

Data Sources

1. Behavioral Risk Factor Surveillance System (BRFSS), Illinois Center for Health Statistics, Illinois Department of Public Health, May 2005. Adults are individuals ages 18 and older. Smoking is defined as those who report they currently smoke.
2. Pregnancy Risk Assessment Monitoring System (PRAMS), Illinois Center for Health Statistics, Illinois Department of Public Health, May 2005.
3. 2005 Illinois Youth Tobacco Survey, Office of Health Promotion, Division of Chronic Disease Prevention and Control, Illinois Department of Public Health, unpublished data.
4. Centers for Disease Control and Prevention (CDC). Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC): Adult SAMMEC and Maternal and Child Health (MCH) SAMMEC software. Available on-line: <http://apps.nccd.cdc.gov/sammec/>, accessed May 2005. SAMMEC data reflects the economic and disease burden experienced by Illinois residents ages 35 and older, unless noted otherwise. Smoking-attributed data for infant deaths reflects maternal smoking prevalence. Smoking-attributable deaths were defined using ICD-9 for 1997-1998 and ICD-10 for 1999-2001.
5. American Legacy Foundation. "Saving Lives, Saving Money. Why States Should Invest in a Tobacco-Free Future." Washington, D.C. American Legacy Foundation, 2002. Available on-line: www.americanlegacy.org, accessed April 2002.
6. Campaign for Tobacco-Free Kids. "Increases to State Smoking-Caused Medicaid Costs 1993 to 2001 and Projected Future Savings From a 25% Reduction in State Smoking Rates." Available on-line: www.tobaccofreekids.org, accessed April 2002.
7. CDC WONDER. Compressed Mortality File: Underlying Cause-of-Death. Available online: <http://wonder.cdc.gov/>, accessed May 2005. Average annual number of deaths among all ages for all causes occurring from 1997 through 2001.

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