

TOBACCO'S ROAD

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Comment [1]: this article contains all tobacco material. use this instead of separate articles to add and update.

1. The Cost of Smoking

Tobacco, someone wryly observed, is the only drug that kills when taken at recommended doses. It kills quietly, without dramatic headlines, and slowly--no sudden OD's--but it kills very steadily. A single cigarette takes five minutes from a smoker's life.¹ In the course of a week, that adds up to about 10 hours. By smoking two packs a day, a chronic smoker shaves no fewer than eight--and as many as 18--years from his or her life span.^{2, 3}

Do some smokers beat the odds? When I tell people that my own father--a smoker for 60 years--lived till he was 78, they usually say something like, "Well, at least he lived to a ripe old." They never heard the hacking cough that racked his body each morning from the time he was forty. They never saw the shortness of breath that forced him, constantly, to narrow the boundaries of his life.

My father got sick more often and stayed sick longer. Colds become chronic and summer flus stuck around through Christmas. Like other smokers, at least a third of his sick-

time was directly caused by his habit. My father paid the daily price that every smoker pays, and it's a price with terrible inflation built in. By his sixties, a walk on a summer day held no pleasure for him; a flight of stairs was a daunting obstacle.

Tobacco is a viciouscrippler and a diverse killer. The damage it inflicts on the human body reads like a litany of a modern plague:

* Each year nearly half-a-million smokers are hospitalized for chronic bronchitis and pulmonary emphysema.⁴

* Cigarettes directly cause one third of the 520,000 annual cases of ischemic heart disease, the number one cause of death in this country.^{5, 6}

* Cigarettes cause more than 80 percent of lung cancers, the most common form of cancer in the United States and the major cause of cancer death.

* Smoking can cause chronic inflammation and gangrene in the limbs, a potentially fatal condition known as Buerger's disease. Among diabetics, smokers are 2 to 3 times more likely to develop kidney damage than nonsmokers.⁷

* Aside from the obvious smoke-induced cancers, like those of lungs, larynx, and mouth, smoking a pack a day doubles the chances of bladder cancer: forty percent of this cancer in males and thirty percent in females are related to cigarettes.⁸

* Smoking compromises the immune system to such an extent that smokers who are HIV positive are twice as likely to develop AIDS as nonsmokers.⁹

* Smokers have almost twice the auto accident rate of nonsmokers.¹⁰

* One fourth of all pancreatic cancers, a particularly fast and lethal form of the disease, are linked to cigarettes.¹¹

Tobacco is a costly killer. In health-conscious California smoking is responsible for 16 percent of all adult deaths and nearly 15 percent of all hospitalizations, excluding pregnancies.¹² Medical care costs alone totaled more than \$4 billion.¹³ Nationwide, medical expenses and lost productivity add up to a whopping \$157.7 billion a year.¹⁴ That averages to more than \$3,300 a year per smoker. And that doesn't include the cost of illness caused in nonsmokers who are the victims of someone else's habit.¹⁵ Smoking-related illnesses account for 7 percent of all health care costs.¹⁶ Put another way, every one of the 22 billion packs of cigarettes sold annually taxes each of us \$7.18 for medical costs, and lost productivity due to premature death.¹⁷

Tobacco is a Grim Reaper of staggering scope. More Americans die each year from tobacco than from fires, car wrecks, illegal drugs, murders and AIDS combined. With one out of six deaths in this country related to tobacco,¹⁸ it is society's most lethal substance, and no other drug even comes close. It claims 3 times as many victims as alcohol. It has killed as many people in the last two days as cocaine and crack will kill in an entire year. Tobacco--the drug that's legal in all 50 states and available on every street corner of America--killed nearly 435,000 people in 1988.¹⁹ And as the smoky legacy of the 50's and 60's gets played out, the numbers will increase yearly. It's as if each day a half-a-dozen fully loaded 747's fell from the sky. It's as if each year the entire population of a city like Oakland, California, simply went up in smoke.

Among the Young

Twenty-six percent of Americans smoked in 1992.²⁰ That's a smaller percentage than any time in recent history--and it will continue to decrease at about half a percent a year. But because of the growing population, the numbers who smoke is actually larger than twenty years ago and now stands at fifty million. And for children, for women, and for the less educated the decrease in the percent who do smoke is a silver lining with a very dark cloud.

If tobacco addiction is a disease, most smokers caught it in childhood. Virtually no one starts smoking after age 25. Sixty percent of all current smokers were addicted by age 16.²¹ Each year, 1.3 million youngsters take up the tobacco habit, that's over 3,000 a day; more than half of them are young girls.²²

Eighteen percent of high school seniors smoke regularly.²³ Nearly a quarter of them started by the sixth grade; half were lighting up by the eighth grade. Currently, one out of five adolescents--20 percent--are regular smokers, up from only one out of 25 in 1975. Today, girls under ten are the largest new group of smokers,²⁴ and women under the age of 23 are the fastest growing group of smokers.²⁵ A new study shows that racial demographics among teen smokers have changed radically. At present, only 4.4 percent of black teens become smokers, compared to nearly 23 percent of white teens. For white teens, that's the highest number in the past 20 years.²⁶

Why are 3.5 million 12- through 17-year-olds hooked on tobacco? How come they buy nearly a billion packs of cigarettes a year.²⁷ One reason is the extraordinary availability of the product. Although cigarette sales are banned to minors in 43 states, enforcement of the legislation in most is incredibly lax. Health and Human Services Secretary Louis W. Sullivan

notes that in Utah--a state that takes its obligations seriously--4,500 citations a year are issued for sales to minors. Citations in the remaining 43 states put together totaled only 32.

A study in the Journal of The American Medical Association²⁸ of tobacco sales in Texas found that of 94 attempts to purchase cigarettes by teen undercover agents, 59 (or 63 percent) ended in a purchase. Warning signs required by law were found in fewer than one-third of the stores, but purchase attempts were equally successful in stores with or without signs. In a 1994 California survey of 2,000 stores, more than half willingly sold cigarettes to minors without asking for proof of age, despite a 104-year-old law against the sale of tobacco to minors.²⁹ Local government and merchants, have, in effect legalized the sale of tobacco to minors.

And if kids can't get their stash over the counter, all they have to do is find a vending machine. Tobacco has the distinction of being the only addictive and lethal drug that you can get by pulling a knob. Vending machines are cleverly designed for even the smallest tot to be able to reach, and with good reason. While they account for only 3 percent of cigarette sales overall, they account for more than 15 percent of cigarette sales to minors.

Another reason kids get hooked on tobacco is Madison Avenue's malevolent linkage of tobacco to glamour on one hand and to machismo on the other. For high school girls, the majority of whom are on some sort of weight-control diet, cigarettes are long, lean, trim, thin and slim. The association of cigarettes with fashionable living is irresistible. In 1985, Glamour magazine ran more than \$6 million in tobacco ads. One fourth of Glamour readers are girls under 18.³⁰

For young boys, who are struggling to define their masculinity, the ads are filled with feats of daring, courage, and good clean sports. In 1985, Sports Illustrated ran \$30 million dollars in tobacco ads. One third of Sports Illustrated readers are boys under 18.³¹ R.J. Reynolds Tobacco is a leading sponsor--and advertiser--of motorcycle and stock-car races, events that attract the attention of millions of boys. RJR Nabisco, the folks who give the world Winston cigarettes, admits to sponsoring 2,500 sporting events a year.³²

While the health consequences in the young are less obvious than in the older population, the occasional cough or lingering flu are portents of future problems. According to a study in the Journal of the American Medical Association, even those young people who smoke only moderately may suffer vascular damage "that is difficult to reverse."³³ And yet, physicians are perplexing lax in cautioning their young smokers about the ultimate dangers of their habit. According to one study, fewer than 15 percent of adolescents who had seen a doctor in the past year were advised to quit.³⁴

In the long run, today's seemingly healthy younger smoker is tomorrow's middle-age wreck. As surgeon general Dr. Antonia Novello pointed, 5 million children alive today will eventually die of a smoking-related illness.³⁵

Among Women

Smoking is increasingly a women's problem. Women are starting younger, and they're staying hooked longer. Some studies indicate that women are about a third more sensitive to nicotine than³⁶ men are. They get a bigger kick from every puff, and they get addicted quicker.³⁷ The consequences for women's health over the next 20 years is staggering. A study

of white women found they are 5 times more likely to develop smoking related cancers than their grandmothers were.³⁸ There is no reason to believe that women of color are faring any better.

* Among this year's crop of high school seniors, only 10 percent of the males will be smokers, compared to 20 percent of the females.³⁹ Among high school dropouts, 40 percent of white females smoke. According to Donald Shopland of the National Cancer Institute, if current trends continue, by 1995 there will be more women smokers than men.⁴⁰

* Women who smoke are between two to six times more likely to have a heart attack than women who don't.⁴¹ Their risk of coronary spasm is more than 7 times that of nonsmokers.⁴² Among women under 50, up to 70 percent of heart attacks are related to smoking.⁴³ And the chances are even greater for women who also use birth-control pills.

* The American Journal of Epidemiology reported that women smokers have a 40 percent greater risk of tubal pregnancies than nonsmoking women.

* New studies show that smoking in one's 20's can lead to colon cancer in later life, even if the smoker quits. Since colon cancer can take 35 years to develop, this present generation of women will almost certainly see an increase in this disease that killed 57,000 people in 1992.

* Among breast removal and breast repair patients, complications among smokers is 30 to 50 percent higher than for nonsmokers.⁴⁴

Until 1987, less-educated women were the only group in the country to have an increase in new smokers.⁴⁵ And while overall rates of new smokers between the ages of 20 to 24 have dropped for men, they've increased for women.

Women who smoke only half-a-pack a day double their risk for strokes⁴⁶ and have a 12 times greater risk of getting lung cancer than nonsmokers.⁴⁷ Women's lung cancer rates have quadrupled since 1960. In the last decade alone, the death rate for lung cancer among women increased 44 percent--6 times more than among men.⁴⁸

And the news for women smokers only gets worse with each new study. When researchers studied about 1500 men and women smokers and nonsmokers, and broke down the quantities smoked by pack-years--the number of cigarettes a pack-a-day smoker consumes in a year (7,305 stick)--they found that women who had fewer than 30 pack years ran seven times the risk of developing lung cancer as a nonsmoking women, and five times the risk of a male smoker. Women who had 60 pack-years or more under their belt faced a risk of cancer fully 82 times more than nonsmoking women and 23 times the risk of a smoking man.⁴⁹ No wonder that, for the first time in our nations history, lung cancer now outranks breast cancer as a killer of women.

The Less Educated

Addiction may be an equal opportunity disease, but tobacco hits some groups much harder than others. "Smoking," says John Pinney of Harvard University, "is slowly becoming a lower socio-economic problem."⁵⁰ Among men in blue-collar jobs, smoking rates approach 50

percent, twice the rate among white-collar workers.⁵¹ Black male blue-collar workers have the highest smoking rates of any group.⁵²

Less educated Americans are more likely to pick up the habit, and more reluctant to drop it: they give up cigarettes five times more slowly than better educated users. According to a 1988 Surgeon General's report, the prevalence of smoking among those without a high school diploma is more than 34 percent. Among people with postgraduate college education, that figure is about 16 percent.⁵³

What worries observers is that people in the lower socio-economic and education categories are much less able to access information about smoking. In other words, the addiction is more likely to become permanently entrenched and passed on through generations: 75 percent of new smokers have at least one parent who smokes.

Having a parent who smokes normalizes the habit and makes it seem like a social nicety. As a child, it was hard to think of my dad as an addict. It just seemed grown-up to smoke, as if every cigarette were a choice. Now I know, of course, that nicotine addicts don't have a choice. They are among the most intensely addicted of all junkies. Only about 15 percent of alcohol drinkers are dependent.⁵⁴ Ninety percent of smokers are hooked. While the majority of pot users--and even heroin users--are chippers, or occasional users, only 1 out of 10 current smokers smoke fewer than 5 cigarettes a day.⁵⁵

My father always carried his stash. Even when his hold on life began to weaken, he clutched his cigarettes as tightly as ever. When he made one of his frequent trips to the hospital for emergency oxygen, he always took his cigarettes with him. As soon as they let him out the

door, he lit up. I'm certain that if I had looked through the shirt he was wearing on the day he died of emphysema and heart congestion I would have found a pack of cigarettes.

My father wasn't any more hardcore than the average smoker. More than half of all smokers recovering from a tobacco-related cancer or heart disease pick up their cigarettes again while in the hospital or shortly after discharge.⁵⁶ Dr. Laurence Denny of Encinitas, California has worked with tracheotomy patient who continued smoking by holding their cigarettes in their tracheotomy. "I've heard of other patients," says Dr. Denny, "who, having had their limbs amputated because of Buerger's disease, would ask family and friends to light and hold their cigarettes for them."

SIDEBAR MATERIAL:

AND YOU DON'T HAVE TO SMOKE IT

For most nicotine addicts, tobacco means smoking. But as many as 22 million Americans satisfy their nicotine addiction with smokeless tobacco with chew or with snuff.

Children under 18 buy more than \$32 million of smokeless tobacco a year.⁵⁷ A random study of more than a thousand high school students found that 10 percent used smokeless tobacco.⁵⁸ The Centers for Disease Control and Prevention estimates that up to 20 percent of high school-age boys chewed tobacco or dipped snuff.⁵⁹ A 1986 report by the Surgeon General estimates that 1.7 million boys between the ages of 12 and 17 had used smokeless tobacco "within the past year."⁶⁰

Snuff is a cured, finely ground tobacco product. When a pinch of it is placed between the upper lips and gums, the user gets a nicotine rush that lasts for about a half hour.

The snuff market is an \$800 million dollar a year industry, and growing. In the last 20 years, use of chewing tobacco and snuff has tripled.⁶¹ In 1989, 42,000 pounds of moist snuff alone were sold, the highest level in recent history, and about 5,000 pounds more than in 1987.⁶² Who buys all this snuff? According to one southern tobacco distributor, "snuff appears mainly to younger and athletic kids, 14 or 15 years old."⁶³

Chew and snuff are probably more addictive than cigarettes, and they are no less dangerous.⁶⁴ UC San Francisco researchers report that chewers get as much nicotine in their system as smokers do and have increased risks for heart problems, gum diseases and oral cancer compared to nonusers.⁶⁵ And the risk is especially serious among younger users,

whom advertisers target their message to. It's this young population which, according to one researcher, is showing "increasing evidence of mouth and throat malignant and premalignant changes."⁶⁶ Twenty-five percent of all teens who chew tobacco began before the age of 12; another twenty-five percent began between ages 5 and 8.⁶⁷ Snuff is a major factor in oral cancer.⁶⁸ And, snuff and chew are strong predictors future involvement with other drugs, including cigarettes.⁶⁹

Until recently, the amount of nicotine in snuff was a closely guarded trade secret. In 1994, an article in The Journal of the American Dental Association listed the nicotine content in several major brands of snuff tobacco. An average of 2 percent is considered high, anything of 3 percent is considered very high. Skoal Wintergreen topped the list with 3.35 percent nicotine. While the percentage in most brands of snuff was higher than in cigarettes, the actual amount of nicotine that snuffers take in compared to smokers is about equal: 20 to 25 milligrams a day.⁷⁰

SIDEBAR MATERIAL

THE HIDDEN TAX

Here's what lung cancer cost at various ages of onset in 1984 dollars, including medical costs and estimated loss of productivity. The lower figure for women reflects lower lifetime estimated earning.⁷¹

AGE	MEN	WOMEN
30-34	\$515,488	\$248,944
35-39	458,052	219,624
40-44	384,800	188,348
45-49	304,421	155,228
50-54	219,927	121,785
55-59	139,159	89,599
60-64	72,371	63,350

SIDEBAR MATERIAL

HOW CIGARETTES KILLED AMERICANS IN 1985⁷²

CAUSE	NUMBERS
Lung cancer.....	108,000
Coronary heart disease.....	115,000
Chronic obstructive pulmonary disease.....	57,000
Other vascular and pulmonary diseases.....	45,000
Other cancers.....	31,600
Cerebrovascular disease.....	27,500
Lung cancer in nonsmokers.....	3,800
Infant and neonatal deaths.....	2,500
Deaths from fires caused by cigarettes.....	1,700
TOTAL.....	392,100

SIDEBAR MATERIAL:

SMOKING AND DEPRESSION

Smoking and depression are a dangerous mix. A 12-year study of more than 2,200 people found that depressed smokers are more than four times more likely to develop cancer than nondepressed smokers. The reason seems to be that depression causes hormonal changes that weaken the immune system.⁷³

2. A FAMILY DISEASE

I've lived with smokers for most of my life. My father smoked, I had roommates who did so, and my wife went through two packs of Camels a day for the first 13 years of our marriage.

As a child, there was nothing I could--or even thought I should--do about smoke in my environment. But as an adult, I put out a fair deal of effort trying to minimize the discomfort of sharing a home with tobacco. I bought filtering devices, ionization machines, air conditioners and fans. I worked out polite compromises with my smoking cohabitants, getting them to agree to smoke in only one room of the house.

My best efforts, I now know, were of only minimal value. According to a 1986 report by the Surgeon General, cost-effective filtration of tobacco smoke from the air is not available and because tobacco smoke easily spreads from room to room, the presence of a smoker anywhere in the house can "significantly" increase levels of breathable pollutants.⁷⁴ In other words, in any compromise with smoking, it's the nonsmoker who pays the heaviest price.

The price can be the simple irritation of carrying the smell of his or her habit on your skin, in your hair, and on your clothes. Or it can be the simple annoyance of trying to get--and keep--the attention of someone who's in continual states of distraction: "I'll be there in a minute, just let me get my ciggies"; preoccupation: "Did you see where I left my lighter"; and frequent withdrawal and who needs a fix about every 15 minutes--no matter what you're doing together: "Do you mind if I smoke in here just this once?".

But living with a smoker isn't simply bothersome. The Environmental Protection Agency classifies sidestream smoke as a "known carcinogen" that is "one of the most widespread and harmful indoor air pollutants."^{75, 76} Smoking--a habit that's been part of western culture for nearly 500 years--is only now being seen for what it always has been: a family disease.

Smoking is a family disease in a way no other addiction--alcoholism, say--approaches. With alcohol, it's what happens to the drinker that impacts the family--the alcoholic's days of

physical impairment which strain a family's finances and social life; the nerve wrenching days as the drinker tries to control or give up his habit and everyone walks around on eggshells; the alcoholic's death at an early age.

All this also happens in a smoker's family, but there's more. When you live with a drinker, you're usually not forced to take a slug of gin every time they do. When you live with a nicotine addict you become a "passive smoker," breathing as much sidestream smoke as if you puffed on 5 cigarettes a day. The consequences can be debilitating and deadly. Consider these facts:

- * Secondhand smoke causes more than 40,000 heart disease and respiratory deaths a year, making it the third leading cause of preventable death in America.⁷⁷
An additional 3,000 secondhand smokers die of lung cancer each year, according to the EPA.⁷⁸ Other researchers place the number as high as 4,000.⁷⁹
- * Spouses of smokers exhibit a higher rate of heart abnormalities and heart attacks.⁸⁰
- * Living with a smoker increases a person's risk of heart disease up to 30 percent.⁸¹
Ultrasound readings show that second-hand smoke significantly narrows arteries.⁸²
- * Sidestream smoke effects your energy level by decreasing the amount of oxygen that heart cells can convert to ATP, a chemical that energizes the heart. People who inhale sidestream smoke can't exercise as long as people who breaths smoke-free air.

What's in Smoke?

Cigarette smoke is a complex assortment of different gases and particles that contain some of the most poisonous substances on earth. In a safe deep within the Centers for Disease control is a list of ingredients cigarette manufacturers add to their products. It is a felony for anyone to reveal what these substances are. But in 1994, after National Public Radio discovered what 13 of these chemicals were, and after Representative Henry Waxman of Los Angeles threatened to subpoena manufacturers' records, the lists were released. Some of the additives ingredients were known to cause nerve damage, others cause convulsions, still others are known depletors of ozone. There are insecticides among them, as well as nicotine. It was the latter ingredient that has added fuel to the contention that cigarette makers manipulate the level of nicotine to hook smokers and keep them hooked. Cigarette manufacturers and their apologist insist that the quantities of any additives per cigarette are negligible and pose no health threat. Other observers note that over the course of a smoker's lifetime, or a child's growing years, "negligible" quantities add up to obvious danger. Cigarette manufacturers insist that any nicotine added is merely to make up for the nicotine that is removed during tobacco processing, a procedure used to "ensure a smoker's continued pleasure."

But no matter what or how much is added to a smoker's tobacco, it may be people in the smoker's environment who have more to worry about. After all, inhaled smoke is forced through a few inches of tobacco and filters on the way to a smoker's lung, while sidestream smoke coils up from the burning tip of a cigarette enters the air untreated. Sidestream smoke contains about 50 times more cancer-causing agents than mainstream smoke.⁸³

The burning end of a cigarette--where temperatures reach 1600 degrees Fahrenheit--is such a remarkable toxic factory that no one is quite sure just how many substances are produced there, but the best estimates place the number at about ten thousand.

About five percent of sidestream smoke is made up of carbon monoxide (CO), a colorless, odorless, and potentially deadly gas.⁸⁴ Cigarette smoke contains 40,000 parts of CO per million, 800 times more than the standard for clean indoor air. In Smoking: Your Choice Between Life and Death, Dr. Alton Ochsner reports of a meeting in a hotel room of safety engineers concerned about levels of carbon monoxide in New York City's Holland Tunnel that exceeded existing federal standards. As the engineers sat around discussing the issue, one of them noticed that their measuring instrument was picking up a reading of the carbon monoxide in the cigarette-filled hotel room. It was, says Dr. Ochsner, "definitely higher than that of the Holland Tunnel."

Carbon Monoxide replaces oxygen in the blood, causing shortness of breath in small doses, and anything from dizziness, nausea, and headaches to brain and heart damage, and death in higher doses. It enhances cholesterol buildup and the development of atherosclerosis.⁸⁵ Carbon monoxide is so dangerous to human health, it is the only substance identified by name in cigarette warning labels. Sidestream smoke contains 5 times more carbon monoxide than mainstream smoke.⁸⁶

Some of the other components of sidestream smoke are:

Hydrogen cyanide (CHN), a gas that can be as dangerous as it sounds. It causes headaches in lower doses, and convulsions in higher doses. Cigarette smoke contains 200 times more CHN than the Federal limit of ten parts per million.

Benzene, a carcinogenic. When benzene was discovered in Perrier water last year, all bottles of the product were withdrawn immediately. Cigarettes contain 2,000 times the concentration and sidestream smoke has more benzene than mainstream smoke.⁸⁷

Tar, a myriad of 3,000 separate chemicals, at least 20 of which are know carcinogens.

Sidestream smoke contains 3 times more tar than mainstream smoke.⁸⁸

N-nitrosamines, a group of highly carcinogenic compounds. Tobacco smoke is the only source of some of these compounds in the general environment.⁸⁹ Sidestream smoke is 20 to 100 times richer in nitrosamines than mainstream smoke.

Acetaldehyde, an addictive sedative that is one of the major constituents of smoke.

Acetaldehyde is the primary metabolite of alcohol, but is 20 to 30 times more toxic.⁹⁰ One writer speculates that alcoholics who smoke--and the majority do--may be addicted to both nicotine and acetaldehyde.⁹¹ High acetaldehyde blocks protein synthesis in heart muscle and interferes with brain chemistry.

Nicotine, one of tar's components and the stuff that hooks the smoker with a nervous system kick. The depression that follows is easily cured with a cup of coffee, and another cigarette. Nicotine makes a great insecticide--it's the tobacco's plant protection against bugs--but the federal government bans it as too toxic for use. And no wonder. If a smoker could consume 80 cigarettes all at once, the nicotine content would be lethal. Sidestream smoke contains 3 times more nicotine than mainstream smoke.⁹²

Smoke and Children

For young children, living with a smoker can be a sickening experience. They have more respiratory symptoms and infections, and their lungs mature more slowly than kids who don't live with smokers.⁹³ Up to 300,000 cases of bronchitis and pneumonia in children under 18 can be traced to second-hand smoke.⁹⁴ If they are routinely exposed to passive smoke they have higher blood cholesterol and lower levels of a blood protein that may protect against heart attacks.⁹⁵ They are hospitalized more frequently for respiratory infections--which is understandable--and they are also hospitalized more frequently for digestive disorders, indicating that smoking incapacitates their young immune systems.⁹⁶ They have an increased risk for leukemia and possibly other cancers. Chronic exposure to cigarette smoke as a child and adolescent doubles the risk of developing lung cancer later in life. Secondary smoke inhaled as a child is responsible for about one in six lung cancers of nonsmokers.⁹⁷

Like the psychological symptoms of children of alcoholics, the diverse maladies that many smokers' children suffer are rarely linked to the true cause because the family disease of smoking--like alcoholism--is characterized by massive denial, minimizing and resignation. If one spouse smokes it's likely that the other has given up trying to get him or her to stop. If they both smoke, there is a silent conspiracy to ascribe blame to other people, places or things. Addicts need to protect their stash.

So if a smoker's child more frequently suffers from chronic cough and phlegm than other kids, if they have an increased frequency of hospitalization for bronchitis and pneumonia during the first year of life, this can be explained by their "frailty" or by something they caught in daycare.

If they are more often the victims of chronic ear effusions, this is due to cold weather, or the humidity.

And if they are more likely to one day take up active smoking at an early age than children of non-smoking parents, well, then, they are merely taking up a family tradition that never hurt anyone, anyway.⁹⁸

The Unborn Smoker

The ultimate passive smoker is the unborn child whose mother uses tobacco or breathes in the presence of a lit cigarette. Cigarette toxins readily pass from the mother's blood to the fetus's. A 1994 study in the Journal of the American Medical Association suggested that even women who are exposed to secondary smoke for only a few hours a day may be giving birth to children with an increased risk for attention and language problems.⁹⁹

And the problems mount when pregnant women themselves smoke. A woman who smokes two packs a day reduces the oxygen supply to the unborn child by 25 percent.¹⁰⁰ Smoking during pregnancy may reduce a child's birth weight by ten percent, possibly because of the presence of cyanide in the tobacco,¹⁰¹ and may cause reduced lung volume at birth.¹⁰² Women who smoke have twice the chance of giving birth to underweight children, the number one predictor of infant mortality.¹⁰³ A mother's smoking during pregnancy can cause lifelong subtle hearing problems for their children,¹⁰⁴ and can double the risk of a child being born with cleft lips and palate.¹⁰⁵ Children born to mothers who smoke at least half a pack a day are three times more likely to develop asthma in the first year of life than those born to nonsmokers.¹⁰⁶ And the damage that tobacco causes isn't confined solely to mom's smoking. Recent research indicates that paternal smoking prior to impregnation may damage the father's sperm, leading to an increased risk for childhood brain cancer and leukemia.¹⁰⁷

Smoking during pregnancy causes uterine bleeding, the premature detachment of the placenta, and premature delivery.¹⁰⁸ Maternal smoking may be the culprit in as many as 141,000 miscarriages a year in this country alone.¹⁰⁹ A study in The Journal of the American Medical Association suggests that women who smoke during pregnancy have a 40 percent greater risk than nonsmokers of having a late miscarriage, and double the chance of their child succumbing to crib death.¹¹⁰ Maternal smoking may cause 6 percent of childhood cancers and nearly 20 percent of acute lymphocytic leukemias.¹¹¹

Maternal smoking kills 5,6000 babies a year, and causes 26,000 newborns to be admitted to ICU's because of low birth weight.¹¹² One study found that eliminating maternal smoking could cut infant deaths by 10 percent.¹¹³ It could also make a dent in skyrocketing medical costs:

maternal smoking may be responsible for 5 percent of every dollar we spend on newborn intensive care.¹¹⁴

But eliminating maternal smoking remains a pipe dream. Despite the known consequences of maternal smoking, tobacco is so addictive that one-third of pregnant women who smoke can't stop at all, and another third can merely "cut down." Only a third manage to quit.¹¹⁵ And although the media has rightfully given enormous attention to the use of cocaine by pregnant women, tobacco use outpaces any other drug by far. Among pregnant Black women, 4.5 percent use cocaine; 20 percent smoke cigarettes. Among Hispanic women, less than one percent use cocaine while nearly 6 percent smoke. And among white women, less than half a percent use cocaine compared to 25 percent who smoke.¹¹⁶

Changing Values

Social attitudes towards tobacco have undergone radical transformation in this century, but they have been generally slow in forming. For instance, while the fact that cigarettes kill has been known since 1927, when an article in the British journal Lancet correlated lung cancer and cigarettes, the health hazards of smoking became part of our national consciousness only in 1964, with publication of a report by the Surgeon General.

Calling a smoker a drug addict in 1942 would probably have started a brawl, even though that was the year that researchers--again in Lancet--compared nicotine addiction to a morphine habit.¹¹⁷ General acceptance of the idea was delayed for nearly 50 years, when Surgeon General Koop labelled nicotine as addictive as heroin and cocaine. Today, calling a smoker an addict will hardly raise an eyebrow.

Now we are engaged in rethinking our attitudes towards environmental smoke, and in this one area values are changing with stunning rapidity. Within only a few years, smoking has been banned on most domestic flights; in a growing number of communities smoking in restaurants is no longer tolerated; employers are obliged to provide a smoke-free environment for workers; and more and more people seem comfortable informing guests that theirs is a nonsmoking home.

As we become increasingly aware of the health consequences of passive smoking--particularly to children--habits will continue to change, and problematic legal and social issues will emerge. Courts have already begun to take parents' smoking habits into consideration when awarding custody and in some cases have attempted to limit or prohibit smoking by parents in the presence of children.¹¹⁸ In August, 1990, for instance, a California Superior Court judge ordered a mother not to smoke in the presence of her 5-year-old child. The judge issued the order in response to a request by the boy's father, who has joint custody. There have been at least 18 cases of smoking-related custody decisions.¹¹⁹ And in Maryland a judge put a 3-year-old asthmatic girl in a foster care home because her parents continued to smoke in her presence.¹²⁰ The Tobacco Institute and Tobacco Action Network said that industry lawyers would look into such cases.

In 1993 the EPA issued a recommendation that parents of young children refrain from smoking in their homes because of a "serious and substantial" health risks.¹²¹ It was the clearest and strongest message ever issued by that agency and probably reflects the thinking of a majority of people. It may also reflect the thinking of a growing number of smokers. IN 1994 in California, 27 percent of smokers say they do not smoke in their home, up from about 19 percent in 1992.¹²² We may yet see the day when smoking tobacco in the presence of a child will be

considered as odious--and as criminal--as smoking crack is today. For some, the thought is chilling. For others, it is sobering.

SIDEBAR MATERIAL:

DO YOU MIND IF I MOVE?

Have smokers really gotten the message that nonsmokers don't want to breathe their habit? Are nonsmokers finally getting more assertive about defending the quality of the air they breathe? Three researchers analyzed data from 22,000 adults and found that half of all smokers light up in public places without asking if others mind. When that happens, half of the nonsmokers just move away from the smoker, about 40 percent do nothing, and only 4 percent have the gumption to ask the smoker to douse his butt. Do smokers light up because they think their habit isn't hurting anyone but themselves? Definitely not. A federal study found that two-thirds of all current smokers say they know secondary smoking is harmful to health.¹²³ They light up because they know people around them will suffer in silence. Maybe that's why it's called passive smoking.

SIDEBAR MATERIAL

HOW CIGARETTES CAUSE LUNG CANCER

About 7 percent of regular smokers develop lung cancer, but until recently no one really knew how it happened. According to a 1990 study by Dr. Theodore L. McLemore, certain aromatic hydrocarbons in cigarette tar "switch on" an enzyme-producing lung cell gene. This enzyme alters the hydrocarbons to a more potent form which damages DNA, thereby producing cancer. Without the enzymatic conversion, the hydrocarbons would be incapable of altering DNA. In about half of the lung tumors examined by Dr. McLemore, the gene was in a permanent "on" position. Dr. McLemore says that when a person gives up smoking, the enzyme-producing gene shuts down within a few weeks. This discovery of a "lung cancer gene" may help identify those people who are more prone to developing lung cancer. But other scientists caution that the discovery of this gene addresses only one mechanism whereby one class of chemicals produce cancer. There are ten thousand other chemicals in cigarette smoke.¹²⁴

SIDEBAR MATERIAL:

DO YOU MIND IF I WORK?

If you think eating among smokers is tough on you, imagine what it's like to work in a restaurant that allows smoking. It's more than just a nuisance, says the Journal of the American Medical Association. Restaurant employees have a 50-90 percent higher risk for lung cancer than the rest of us. The Environmental Tobacco Smoke (ETS) in restaurants measures even higher than the ETS in smokers' homes. And bars were worse than restaurants. ETS there was more than 4 times higher than in smokers' homes.

3. QUITTING.

On his 70th birthday, my father--a two-pack-a-day Pall Mall survivor--once again wound up in an emergency room coughing, wheezing and barely able to breathe. "Charlie," the doctor said, "I'm telling you for the last time, you've got to stop smoking." "I already have," said my father. "When was that," the doctor asked skeptically. "About ten minutes ago," my father answered sheepishly.

My father was like most smokers: quitting and smoking and quitting again was part of the habit. Did he really want to stop? Sure, as do seventy-five percent of smokers.¹²⁵ And most have tried to do so at least once.¹²⁶ Last year, nearly one out of three smokers--about 17 million people--made the attempt, but only about 1.3 million were successful.¹²⁷ That means that more than ninety percent of quitters relapsed within a year.¹²⁸

Quitting is tough, and it's scary. Ninety percent of first-time smokers will have trouble kicking the habit, compared to only twenty percent of first-time cokers.¹²⁹ When 1000 persons coming into treatment for alcohol or drug problems were asked about quitting cigarettes, three-

quarters said that it would be at least as hard as quitting their primary drug. The majority said that cigarettes would actually be tougher to quit.¹³⁰

But quitting isn't impossible. About half of all people who have ever smoked regularly have quit.¹³¹ More than 40 million ex-smokers are managing to stay clean and with every passing year fewer Americans continue to light up. In 1965, more than half of all adult males smoked; by 1989 that figure was down to 30 percent. (For women in that time period, smokers went from 34 percent to 24 percent.)¹³²

For most smokers, quitting is the end of a long process. Somewhere along the way the majority first toy with the idea of becoming sensible smokers. Like alcoholics who drink "only beer," these smokers either switch to "safer" low-yield brands--95 percent of all cigarettes sold are filtered--or simply try to smoke fewer cigarettes. Filters sound like a great idea, unfortunately, while they may do great on testing machines, in the human mouth they break down, leaking levels of tar that are three to seven times the certified amounts.¹³³

Alas, as one writer put it, using a "safer" cigarette is like jumping from the 36th floor of a building instead of the 39th,¹³⁴ and the best filter in the world can't turn smoking into a healthy pursuit. A three-year study of more than 3,000 female smokers found that those using low-tar cigarettes still had heart attack rates that were four times higher than nonsmokers.¹³⁵ "Safer" smokers get their daily minimum dose of nicotine--and tars--simply by smoking more cigarettes.¹³⁶ No wonder that although the number of smokers in the U.S. dropped by 10 million people in the last 50 years, the number of cigarettes sold has shot up by 150 billion sticks a year.¹³⁷

Low-yield cigarettes may also contain a higher percentage of nicotine by weight. Filtering and ventilation dilute some of it¹³⁸, but take a couple of extra puffs and you'll wind up with same nicotine blood level as if you were smoking a high-yield brand.¹³⁹ Furthermore, a 1994 study by the Federal Trade Commission found that the methods used to test for tar and nicotine levels found that the entire process is faulty, leaving open the possibility that low tar may be nothing more than an advertising buzzword.¹⁴⁰

Trying to smoke less is a strategy that seems to work well in the short run, but as a long-term strategy it's futile. San Diego Psychologist Marlene Maheu, author of a study on smoking cessation, notes that when you look at the filter of a regular smoker, it's yellowish. When you look at a filter from a smoker who's "cutting down," it's absolutely black.

Different Strokes

Smoking cessation has spawned an industry. Quitters are barraged by a diverse--and confusing--choice of quitting aids, from cessation seminars, to cigarette-sized tubes loaded with menthol, to special filters, to subliminal tapes, to nicotine gum and clonidine patches. Do any of them work? The general rule seems to be, the less hooked a smoker is, the more likely any method has a chance. But for the highly dependent smoker, finding the right intervention may be a lot more difficult, and a lot more crucial.

If we think of smokers as similar to cocaine abusers, we can see how important matching a quitting technique to the level of dependence is. A coker who takes a few lines every other weekend won't require the same intense program a full-blown crack addict does. One reason so many smokers fail at quitting on any single attempt is that they underestimate the power of their

addiction. A two-pack-a-day twenty year smoker is going to need a lot more than a subliminal tape.

If you're a smoker looking over the following list, and you're thinking, "I tried that and it didn't work," try something else. It really does pay to persevere. Research shows that it usually takes three to five attempts before the effort to quit clicks in.

* **Filters** which slowly reduce the tar and nicotine content of smoke are available at every drug store, and they look like a sound idea for sneaking up on Q-day. But after 8 weeks of this weaning, according to a study published in American Pharmacy, only a small minority--probably the least dependent--of smokers quit.¹⁴¹

* **Acupuncture** is tried by some, and has a documented success rate of about 15 percent.¹⁴² "Acupuncture increases a person's endorphin level," says acupuncturist Jack Miller, Dean of the Pacific School of Oriental Medicine in San Diego, "which produces a sense of well-being that can get you over the worst of withdrawal."

* **Hypnosis** may also help, especially with the early stages of withdrawal. Success rates seem to be grossly exaggerated by its proponents, but if you're strongly motivated to quit, it may be the thing that keeps you on the straight and narrow.

* **Nicotine gum** supplies the addict with doses of nicotine that ease withdrawal. Two drawbacks: at \$30 for 96 pieces, it's expensive, and it's completely ineffective without a behavioral modification program. (Unfortunately, 99.5 percent of smokers prescribed nicotine gum are not put on any kind of program.)¹⁴³ When it's used as part of an overall program, nicotine gum has a success rate of up to 45 percent, even with highly dependent smokers.¹⁴⁴

Purists object to using nicotine to fight nicotine and caution that chewers can get addicted to the gum itself. But according to Maheu, that's not necessarily a bad thing. "If someone's smoking 40 cigarettes a day and they wind up chewing 10 or 15 pieces of gum instead," she says, "what they are getting is a lot less harmful. The only active agent in the cigarette is the nicotine, all the rest is toxic."

* **Clonidine**, a drug that's used to reduce cravings in heroin and cocaine addicts, has also been tried with tobacco addicts. While it may help those who are moderately addicted, a study in a recent edition the Journal of the American Medical Association concludes that heavily dependent smokers don't seem to benefit from it.¹⁴⁵

* Skin patches, sold under the names of Nicoban or Habitrol, are the latest tobacco quitting aids. They're essentially band-aids that are saturated with nicotine. When they're placed on a quitter's skin, the nicotine leaches through the skin into blood vessels. You'll start with the strongest patch which, after about four hours, will give you the nicotine equivalent of a pack-a-day habit. In the course of 10 to 12 weeks, you'll use weaker patches, with the hope that after that you'll be weaned for good. Do they work? Studies show they do, at least in the short term, for about 25 percent of users.

* **Smoking programs** offer group support, education and professional guidance. Two of the most popular smoking cessation programs are the American Cancer Society's Fresh Start and the American Lung Association's Freedom from Smoking. One study found that after one year, less than thirty percent of program graduates weren't smoking on the day they were polled. Only 15 and 20 percent had gone the year without a relapse.¹⁴⁶ While that seems like a modest number, for that 15 or 20 percent the program was 100 percent effective.¹⁴⁷

* **Smokenders** and other more structured, long-term programs like it may be the ideal choice for hardcore addicts. According to Cheryl Wuchina, Smoking Cessation Coordinator of Second Breath Program at Sharp HealthCare in San Diego, "Smoking is a learned behavior. Becoming a nonsmoker also has to be learned. In a structured program you can learn what your smoking triggers are--like stress or boredom--and you can develop coping techniques, from relaxation methods and breathing exercises to cognitive techniques that change your internal dialogue."

* **Heart attacks** have been called the most effective method of smoking cessation since 50 percent of those who survive stay clean. But that means that 50 percent of survivors to right back to smoking. My father was one of those. Between his first heart attack and his death, he managed to squeeze in another 640 cigarettes.

The Process of Recovery

An often cited--but unsubstantiated--statistic says that up to ninety-five percent of quitters do it cold turkey, on their own. It's a tempting image. The lost soul taking control of her life and casting aside the evil weed that held such power over her. But such a model has inherent flaws--and dangers--in it. First, no one is so isolated that their decision to quit can be seen as arising from their own imagination. A friend with emphysema, an anti-smoking billboard or a magazine article, a complaining spouse, coughing kids, all can be a source of information around which a urge to quit can crystalize.

Second, if we reduce the moment of quitting to a flash of willpower, enlightenment, or divine guidance the most critical point about kicking cigarettes is completely missed. Cessation

isn't just quitting. It's a process of recovery that--like recovery from any substance--can be delicate and complex. Depending on willpower to get you through recovery is like driving a car without gas: you only move if you're coasting downhill. But for many smokers, after the smoke clears, old life problems remain and new issues arise.

Some ex-smokers--certainly the majority of hardcore smokers--may need a full range of aftercare support, from group work and individual therapy to nutritional guidance and possibly antidepressant medication, no matter what method of stopping they eventually chose. According to studies cited in the American Review of Respiratory Diseases, very few smokers remain abstinent without some coping mechanisms.¹⁴⁸

Overall, about 10 million American smokers may be using nicotine to self-medicate an underlying depression. (Smokers are nearly twice as likely to have serious depression in their history than non-smokers. They are also more than four times more likely to develop cancer than nondepressed smokers.)¹⁴⁹ When these people try to quit, it's the withdrawal as well as the gathering clouds of depression that drive them back to their habit.¹⁵⁰

Fear of weight gain is a serious consideration to some ex-smokers, especially among white females. Here are the facts: for most people, weight gain is fairly moderate. Five years after quitting, men have gained about 5 pounds and women have gained about ten. Since most smokers weigh less than nonsmokers because of nicotine's metabolic effect, chances are the average smoker will wind up weighing in the normal range. But about 10 percent of male smokers gain 13 pounds five years after quitting, and about 10 percent of women gain 30 pounds, with blacks being more likely to put on excess weight than whites. A woman who's a heavy smoker, under the age of 55 and have had kids, is in an especially high-risk group for

extra poundage.¹⁵¹ For smokers more concerned with the imminent prospect of gaining a few pounds than the with possibility of developing lung cancer sometime in the future, weight gain is an issue that shouldn't be ignored.

The prospect of depression during withdrawal needs to be taken seriously. The fact is, people with major depression are more likely to smoke than the general population, and have a harder time giving up the habit. A study in The American Journal of Psychiatry found that 75 percent of smokers with a history of major depression develop a depressed mood during the first week of withdrawal, compared to 30 percent of smokers without a history of depression. If you're prone to depression, you might want to get a psychiatric consult before quitting.¹⁵²

Family problems can also be intensified in the early stages of tobacco recovery. Living with a smoker may not be pleasant, but living with a white-knuckling quitter can be hell, and many spouses may urge their quitter to jump off the wagon. These ex-smokers and families both need support and a place to vent their frustrations.

And support for smokers shouldn't be a two or three week stint. Treatment professionals are increasingly pushing for at least a year's aftercare. "The urge to smoke is hooked into external situations," says Maheu. "For some people, a walk in the fall woods means smoking, for others it's Christmas. You need to go through the cycle of a year to cope with all of the triggers."

Treatment providers advise giving up activities that are closely connected with smoking, like those hearty cups of morning coffee. After all, how many smokers ever start their day with coffee without a cigarette? There's also evidence that recent quitters may be unusually sensitive to caffeine. Because cigarette tars accelerate the breakdown of caffeine, quitters get a real wallop out of their usual dose of coffee, with caffeine blood levels more than 2 1/2 times higher

than before quitting.¹⁵³ And if you're using nicotine gum as part of your recovery, coffee, colas, and other acidic drinks taken shortly before or during nicotine gum use can block the absorption of nicotine in the mouth.¹⁵⁴

Diet can also be an important part of quitting. Studies have shown that ex-smokers have a better chance of staying clean eating diets high in carbohydrates.¹⁵⁵ Increased fluid intake--along with moderate exercise--may help flush nicotine from the system.

Your workplace may be an important part of your chances for success. In 1991, Insight magazine reported that, two years after the New England Telephone Company in Boston banned smoking, more than 20 percent of the workers who were smokers when the policy was started had kicked the habit, and nearly a third of the smokers who still lit up said they were smoking less. (Nationally, only about 2 to 5 percent of smokers quit per year.¹⁵⁶)

And lastly, if you're serious about quitting, you may have to stay away from your smoking friends, at least for awhile. Several studies done in the past 20 years show that ex-smokers who sit around with smoking friends or coworkers have higher rates of relapse than ex-smokers who don't, and when they do lapse, they go on to regular smoking more quickly.^{157, 158}

Those of Us in Recovery

For those of us in recovery from alcohol or drugs, quitting cigarettes has a special urgency. Surgeon General Koop's 1988 report on the addictiveness of nicotine really cleared the smoke from our eyes, if not our meetings. Tobacco was now officially a substance whose effects were "similar to those that determine addiction to drugs such as heroin and cocaine."¹⁵⁹ Puffing on a cigarette was no longer a harmless social nicety. It was a baffling, cunning and deadly

addiction pure and simple. When we went to an NA meeting someone spoke of their "five years of sobriety," it was hard to ignore that smoldering cigarette in their hand.

Many people in AA or NA have come to rely on these the 12 Step and 12 Traditions to resolve all the problematical issues of their lives, but the 13th Tradition--collective denial about cigarettes--has been a killing conspiracy for countless thousands. Bill W. died a practicing tobacco addict, killed by emphysema. Marty Mann, founder of the National Council on Alcoholism, also died from cigarettes. Since it was tobacco that killed them, was alcohol really their prime addiction? If we can't define a prime addiction as the one that kills someone, how on earth should we define it? Did the old timer's leave cigarettes out of the sobriety equation just to protect their stash? What are we to make of the fact that, although per capita cigarette consumption has fallen every year since 1973, among drug abusers there has been absolutely no decline since 1960.¹⁶⁰ Less than 30 percent of the general population smoke, compared to 80 percent of recovering addicts?¹⁶¹

For those of us in the recovery professions, the questions about tobacco use are no less critical. Thirty to sixty percent of chemical dependency staffers are themselves smokers.¹⁶² Do so many treatment centers allow--even encourage--recovering addicts and alcoholics to continue smoking to simply prevent the staff's withdrawal? Or, since the majority of patients are smokers, is the smoking lamp lit just to make everyone's job easier.¹⁶³

Whatever the reason, as Marlboros burn, counselors all over the country repeat the old wisdom of "getting rid of one drug at a time." But where on earth did that notion come from, and what was so wise about it?

"We used to think it was too stressful to give up cigarettes while also giving up alcohol and drugs," says Mike Maher, Chemical Dependency Program Director at Alvarado Parkway Institute in La Mesa, California. "But how many alcoholics and addicts get into recovery only to die of lung cancer or some other disease?" Indeed, illnesses caused by smoking are the leading causes of death among recovering alcoholic/addicts.¹⁶⁴

In the final analysis, whether we are dealing with our own smoking habit, a family member's, a group's or a patient's, there are only two ways to keep smoke from clouding our vision. Either put out the cigarettes. Or close our eyes.

Withdrawal

For anyone considering quitting, the fear of withdrawal looms large. Quitters complain of a wide range of symptoms, from headaches, numbness of limbs, restlessness, and sore throat, to fuzzy thinking and fatigue. Paradoxically, because smoking has successfully paralyzed a smoker's lung cilia, those small hairs which normally sweep out foreign matter, quitting can actually mean coughing more than ever. No wonder so many smokers go back to the habit after a few days.

But withdrawal symptoms do go away. According to the American Cancer Society, most symptoms last no more than two weeks. Knowing what to expect can take lots of the fears away. The American Cancer Society and The American Lung Association both provide excellent, easy-to-understand information. Many people find group support, such as Smokers Anonymous, a comfort and a source of continued determination.

And, finally, if you've already been smoking for 20 years, does it really pay to quit?

Absolutely. According to a study in The New England Journal of Medicine, the chances of being killed by a heart attack decline significantly within the first year of abstinence.¹⁶⁵ And an improvement in the overall quality of life can be enjoyed within days and weeks of kicking the habit. Some smokers who quit say it's like "waking up" the slumbering senses of taste and smell. Others say it's like taking a 20 pound weight off their chest. And still others simply say it's like coming alive again.

WHY GRANDPA STILL SMOKES:

It's not surprising that the percentage of smokers among the elderly is smaller than among any other age group. Millions die before they reach old age, and others quit. But a surprising number of older Americans do keep on smoking--nearly one out of five older men (over 65) and nearly one out of seven older women.¹⁶⁶ There are few sights more striking than a senior citizen mustering the strength to puff on one more cigarette.

In June 1990, Health and Human Services Secretary Louis W. Sullivan told a convention of the American Association of Retired Persons that if the 13 million smokers over the age of 50 kicked the habit, their bodies could repair much of the damage already done, and that they will sleep better and breathe better. And research at the University of Washington backs up this claim. Seniors who quit reduce their chances of heart attack or early death by one-third to one half. So why don't older smokers just quit right now?

In 1988, a survey conducted among a random sampling of 6,000 AARP members aged 50 to 74 found that among current smokers:

- * Three quarters had tried to quit, the rest never had.
- * Two-thirds of those who tried to kick the habit, did so on their own and less than a third had a "great desire" to do so.
- * Two-thirds planned to quit within the year.
- * More than half had switched to lower yield brands in the past year.
- * As a group they reported more respiratory problems than ex-smokers or nonsmokers.

* The five most commonly cited reasons for not quitting right now were: craving, irritability, nervousness, weight gain, reluctance to give up "a pleasure."

Among ex-smokers:

* The most common reasons for quitting: taking control, and health.

* Almost all had quit on their own.

* Less than 40 percent were told to quit by a health care provider.

* Methods they used: threw the cigarettes away, cut down slowly, set a date for quitting, used cigarette substitutes, and spent more time around non-smokers.¹⁶⁷

SIDEBAR MATERIAL:

RESOURCES FOR QUITTERS

SMOKERS ANONYMOUS is a 12 Step self-help support group, feels that people become dependent on cigarettes to "soothe our emotional pains and to fill the emptiness that results from the absence of a spiritual power in our lives." There are SA meetings in most communities.

Central headquarters is at 2118 Greenwich St., San Francisco, CA 94123. Tele: 415/922-8575.

EMPHYSEMA ANONYMOUS is a self-help program for people with emphysema and chronic bronchitis. It's nonprofit, and has chapters in every state. Central headquarters is at 7976

Seminole Blvd., Suit 6, Seminole, FL 33542. Tele: 813-391-9977.

If you're looking for a structured program that gives behavior modification, education, and group support, you might look into **SMOKENDERS**. Each group is an individual franchise, but the program is uniform throughout the country. To find a group near you call 800-828-4357.

THE AMERICAN LUNG ASSOCIATION offers several smoking cessation programs and has some of the best printed and video material around. Headquarters are at 1740 Broadway, New York, NY 10019-4374. Tele: 212-889-3370.

THE AMERICAN CANCER SOCIETY offers free programs that help with stress, weight gain and withdrawal. Check your local phone book or write to American Cancer Society, 1599 Clifton Road NE, Atlanta, GA 30329.

4. A KILLING IN THE MARKETPLACE

Cigarettes are one of the civilized world's most lucrative products. and it's always a bull market. In 1993, yearly cigarette sales at Philip Morris were more than \$25 billion, compared to less than \$17 billion in 1988. And although the majority of the company's revenue comes from its food and beer subsidiaries, the majority of its operating income comes from cigarettes.¹⁶⁸

Even the declining percentage of smokers can't hurt the bottom line. Cigarette manufacturers more than make up any shortfall by raising prices about 5 percent every six months,¹⁶⁹ and smokers go along passively. After all, they're addicted.

There's a lot of money in those little white tubes, one stock analyst said. But how much is a lot? Philip Morris earns a pretax average of about 30 cents a pack on its domestic sales.¹⁷⁰ Annual revenues for the six American tobacco producers were a staggering \$48 billion in 1993. As Forbes magazine noted, "Only the mint makes money more easily."

It Pays To Advertise

The tobacco industry has seen its share of hard times, but it always lands on its feet. The 1971 law banning all cigarette advertising on radio and tv actually turned out to be a double triumph for the cigarette makers. First, although the new law did away with the mandatory health messages that had been balancing tobacco ads, advertising would actually continue, and now it would be free. The enormous tobacco signs splayed across sporting events and flashed across American tv screens is advertising pure and simple. On the 1989 Marlboro Grand Prix, for instance, there were 5,000 "images" of America's best-selling cancer stick.¹⁷¹ Anyone who watched 1991's NASCAR/Winston Cup car racing series saw the Winston logo for nearly 12 hours and heard the cigarette named by announcers more than 2,000 times.¹⁷² Between 1984 and 1991 America's six largest tobacco companies' patronage of sporting events went from \$64 million to \$134 million.¹⁷³ And they don't do it to see more gold balls.

Second, with tv ads prohibited, cigarette manufacturers found themselves with an enormous bundle of advertising cash which they could pump into the printed media. Today, they're the number one advertisers in magazines and newspapers, accounting for 10 percent of the former and more than 15 percent of the latter's advertising pages.¹⁷⁴ In fact, for many magazines, cigarette ads are their very life's breath and without tobacco advertising, more than 150 magazines might have to close shop. Little wonder, then, that these ads are rarely, if ever, balanced with articles that talk of tobacco's harms.¹⁷⁵

A health writer for New Woman, for instance, has reported that her attempts to list smoking as a health risk either got put at the end of a long list or are simply left out. When Newsweek ran an article on nonsmokers' rights, cigarette companies pulled \$1 million in

advertising.¹⁷⁶ When Mirabella magazine alerted its advertisers that it was printing an anti-tobacco article in its April 1990 issue, not a single cigarette ad was placed. A 1992 study by the University of Michigan found that among women's magazines, those that were financially dependent on tobacco ad money were more than two times less likely to feature a tobacco-related article than those who were not dependent on cigarette ads.¹⁷⁷ (In 1986, Cosmopolitan, which has one of the worst tobacco reporting records in the industry, did take space to report that women who were heavy smokers had a lower risk of endometrial cancer than nonsmokers!¹⁷⁸)

As tobacco companies buy up other large companies--a process one writer likened to a cancer that has metastasized--the print media becomes even more of a hostage.¹⁷⁹ How can anyone afford to offend Philip Morris--the world's largest packaged product company--when it now owns General Foods, Miller Brewing Company and Seven-Up, and spends more than \$1 billion a year on advertising.¹⁸⁰ A few years ago Readers Digest, which carries no cigarette ads and has a history of publishing anti-tobacco articles, refused to publish an advertising supplement by the American Heart Association that had text critical of cigarettes.¹⁸¹ When one ad agency worked on ads informing the public of a certain airline's nonsmoking policy last year, its tobacco conglomerate client promptly withdrew its non-tobacco product business.¹⁸²

Also held hostage are the very organizations that should be sources of information. Giving lavishly to women's art projects, women's sporting events, supporting generously women's scholarship funds and magazines, the tobacco industry has made themselves indispensable benefactors of the very population they are seeking to harm the most. In short, as writer Sue Woodman observes, "The tobacco industry makes a generous friend and a formidable foe."¹⁸³

Tobacco salespeople insist that all this advertising doesn't try to convince people to smoke, only to be loyal--or switch--to a particular brand. Nothing could be further from the truth. Brand loyalty is a given in the world of smokers and no more than a very small percentage of smokers ever switch.

And countering suggestions by former Secretary Sullivan and Ronald Davis of the national Centers for Disease control that it is immoral to advertise a product that is deadly, Walker Merryman, vice president of The Tobacco Institute, claims that, not only is advertising protected by the First Amendment, it is also appropriate because "there is no disease exclusive to smokers." Astonishingly, Mr. Merryman has been quoted as saying, "I don't think it's appropriate to say smoking causes any disease."¹⁸⁴ No wonder that, despite the fact that recent polls show that a majority of Americans are fed up with the glamorization of tobacco in the media and are opting for the elimination of cigarette ads in magazines and newspapers, cigarette manufacturers continue to spend more than \$375 million a year on magazine ads alone.¹⁸⁵

Special Targets

All in all, tobacco companies spend nearly 7 million dollars a day, more than is spent on any other commercial product, trying to convince us that smoking is part of a healthy, outdoor, youthful life style.¹⁸⁶ Heavily targeted are magazines that cater to the young and to women. There are 5 million teenage smokers in the US and they each smoke about .6 packs per day, with the number one cigarette of choice being Marlboro, which also happens to be the most advertised brand. In fact, so effective is advertising on teens, nearly 70 percent of these young smokers are Marlboro addicts, while only 25 percent adults smoke that brand.¹⁸⁷ Adding it all up,

Philip Morris--Marlboro's parent company--sells more than \$1 billion worth of cigarettes to kids per year.¹⁸⁸

Females now make up a majority of smokers aged 24 or less.¹⁸⁹ In a 1981 survey, magazines like Glamour, McCall's Magazine, Ladies Home Journal, and Cosmopolitan, had respectively 150, 171, 162, and 198 pages of cigarette ads.¹⁹⁰ In 1985, according to Dr. Thomas Schelling of Harvard University, Glamour magazine carried \$6 million in cigarette advertising; one third of Glamour readers are girls under the age of 18.¹⁹¹

Increasing advertising pressure is being directed against three high-population but underdeveloped markets: virile women ("they go to tractor-pulls with their boyfriends"), children, and racial minorities. According to R.J. Reynolds' marketing experts, a "virile woman," is that 18- to 20-year-old, minimally educated, factory-working woman who deserves her own brand: Dakota. Reynolds says they're not aiming to win new converts to cigarettes, they're just trying to get Marlboro smokers to switch. Reynolds' recent attempt to get more Afro-Americans smoking with a "brand of their own," called Uptown, ran into strong opposition from Health and Human Services Secretary Louis Sullivan and was dropped. And leaders of Afro-American and Hispanic communities are beginning to react to the presence of billboard advertising. Alcohol and tobacco billboards make up a majority of ads in some minority communities. Efforts to curtail billboard advertising always face an uphill struggle: last year tobacco and billboard companies gave more than \$400,000 in speakers fees to congresspeople.¹⁹²

A report by the Center for Science in the Public Interest found that increasing health problems among Hispanics--cancer among them--could be traced to inundation of alcohol, junk food and tobacco advertising that targets this population.¹⁹³ Cigarette manufacturers know their

demographics. Although overall there will be fewer youngsters available to start smoking, the numbers of blacks and Hispanics between the ages of 15 and 25 will rise in the next five years from 5.4 to 5.5 million and from 3.7 to 3.8 million respectively.¹⁹⁴ The current rate of deaths caused by smoking is now 12 percent higher for blacks than for white. And blacks get sicker younger.¹⁹⁵

In 1990 the national Centers for Disease Control proposed a total ban on all cigarette advertising, citing evidence that current advertising encourages children and teen-agers to use cigarettes while it discourages present users from quitting. Whether the tobacco lobby can continue to prevent such legislation is an open question. At this time, 90 percent of all legislation which threatens to limit tobacco use never gets passed. However, the very prospect of such a ban has had an effect. As tobacco companies try to lower their profile, they have voluntarily cut back magazine advertising nearly 30 percent in the first five months of 1990.¹⁹⁶ If the anti-tobacco forces lose the initiative, it seems almost certain that cigarette ads will reappear in all their full-page multi-colored glory.

And even if they lose this battle, the tobacco industry has been endlessly inventive in getting their product the attention it needs. In order to have Lark cigarettes featured in James Bond's adventure, License to Kill, Philip Morris was happy to cough up \$350,000.¹⁹⁷ Phillip Morris and Marlboro paid \$43,500 and \$30,000 respectively to have their brands co-star in Superman II and Supergirl, films aimed at younger lungs, they obviously know what they're doing.¹⁹⁸ Between 1979 and 1983, Brown & Williamson, the nation's third largest cigarette manufacturer, paid out nearly \$1 million to Hollywood producers to get their products on the silver screen. Sylvester Stallone was given a whopping \$300,000 to smoke a few in "Rocky IV," "Rhinstone Cowboy,"

and "Rambo II".¹⁹⁹ In 1990, cigarette firms agreed to have a voluntary prohibition on such paid placements in movies. How does one explain, however, why characters in movies have a smoking rate three times that of the national average. And what characters they tend to be: white, middle-class, successful and good-looking. In other words, these smokers have the lifestyle every American kid is supposed to aspire to.²⁰⁰

European Lead

While there are many powerful voices in this country calling for increasing control of tobacco's use of any media, the leadership in tobacco controls is being taken in Europe. In 1993, American tobacco company shipped more than 51 billion cigarettes to Belgium and Luxembourg alone.²⁰¹ No wonder the European Parliament has called for a complete ban on advertising in the 12 member countries. Finland and Norway have already outlawed all tobacco advertising. In France--where tobacco kills 65,000 people a year and lung cancer rates have jumped 600 percent since 1950--the government has announced plans to ban all advertising by 1993, including tobacco's financing of sporting events.²⁰² And if there is any question about the power of banning advertising while stepping up anti-tobacco measure, consider Canada's experience, where such measures resulted in a 12 percent decrease in smoking in the first five months of 1990.²⁰³

Even if the U.S. government is unwilling to take stronger steps against tobacco, state governments, staggering under the costs of tobacco addiction, are becoming increasingly aggressive. In 1988 in California tobacco claimed 31,000 lives, sixteen percent of all deaths. Nearly one out of eight hospitalizations were due to tobacco caused respiratory or heart diseases and medical costs alone totaled more than 5.8 billion dollars.²⁰⁴

In 1990 California responded to this carnage by launching a \$28 million anti-smoking advertising offensive designed to counter the tobacco industry's illusion that smoking is a healthful recreation. The ultimate goal of the campaign is to cut statewide smoking by 75 percent. One ad aimed at Afro-American smokers--whose lung cancer rate is nearly 60 percent higher than whites--sports the refrain, "We used to pick it, now they want us to smoke it." Another ad shows tobacco spokespersons in a smoke-filled room plotting ways to sell their deadly product. Says one tobacco man, "We're not in business for our health."

SIDEBAR MATERIAL:

STATE'S RIGHTS.

A recent measure to ban smoking inside schools was turned down by lawmakers in Kentucky, where tobacco is the leading cash crop. So, unless school administrators decide otherwise, kids in elementary schools can go right on puffing in special smoking areas set aside for them. How do kids get their ciggies? Anywhere they like. In Kentucky, if you're old enough to say "filter tip," you're old enough to buy. Kentucky has the highest percentage of smokers in the country.

SIDEBAR MATERIAL

GLOBAL GREED

Although tobacco consumption is down to its lowest level since 1942, cigarette production is actually up. What's happening to the surplus? In what's been called a new Opium War, American tobacco companies have launched a massive effort to develop Asian markets, whether Asians like it or not. Japan, South Korea and Taiwan have all knuckled under to Uncle Sam's marketing muscle, ending their tobacco import restrictions.²⁰⁵ In Japan, 10 percent of the tobacco market is now controlled by American tobacco companies.²⁰⁶ In 1993 we imported more than 55 billion cigarettes to that country.²⁰⁷ We shipped a total of 85 billion cigarettes to Pacific Rim countries.²⁰⁸ Cigarettes are responsible for one of America's biggest trade surpluses: \$4.2 billion in 1989.²⁰⁹ Marlboro is the single largest-selling packaged product in the world, surpassing even Coca-Cola.²¹⁰

But as former Surgeon General Koop put it, we export more than smoking satisfaction: "we export disease and death." Worldwide, cigarette production is estimated to be 5 trillion sticks a year. Worldwide, cigarettes kill two and half million people a year--about 5 percent of all deaths--and the number is growing.²¹¹ In the industrialized countries alone, according to the World Health Organization, cigarettes kill 800,000 between the ages 15-64 people each year, "more than the combined total of all deaths due to any form of violence, be it accident, homicide or suicide."²¹² Extrapolating this figures into the future, the WHO concluded that the numbers of people dying premature deaths from tobacco would exceed the number of people who have died in every previous epidemic combined.

As former President Jimmy Carter observed, more Colombians die smoking American cigarettes than Americans die smoking Colombian crack. In Latin America and the Caribbean, 50 percent of young people smoke and yearly deaths have reached 100,000. Still, when a former Surgeon General warned against a frightening increase in smoking-related illnesses south of our borders, tobacco industry spokespersons condemned such warnings as an affront to "self-determination."

On April 5, 1990, Assistant Secretary for Health, Dr. James O. Mason said it was "unconscionable for the mighty transnational tobacco companies--and three of the largest are American--to be peddling their poison abroad, particularly because their targets are less-developed countries." Dr. Mason's subsequent scheduled appearance before a Congressional hearing on the medical effects of tobacco exports was cancelled.²¹³ On July 19, 1990 then vice-President Dan Quayle proclaimed that despite tobacco's known health risks, we should do nothing to impede big tobacco from selling abroad because cigarette sales were part of America's competitive edge. (In the first quarter of 1990, Philip Morris tobacco sales jumped 11 percent over the same quarter of 1989, and profits jumped 30 percent.)

Global tobacco consumption doubled between 1960 and 1986,²¹⁴ and as Madison Avenue puts its collective mind to capturing a market share among Asia's women and children--one out of five Japanese female students smokes--worldwide mortality figures are expected to soar. Countries like Thailand, which does not allow cigarette advertising, may have to change its stance or face retaliatory action from the U.S. In a quote that might have come from a cocaine kingpin, one tobacco executive is reported saying, "You know what we want? We want Asia."

For China, where 60 percent of males over 15 smoke, the scale of tobacco manufacturers' ambition is literally breathtaking. One 1988 joint venture with RJR Nabisco has a yearly production of 2.5 billion cigarettes. The death toll from just this one factory will be 75,000 Chinese a year.²¹⁵ China will have become just one coughing province of Marlboro country.

In a 1985 survey in Taiwan, 26 percent of high school boys and 1 percent of the girls said they had smoked a cigarette. In 1991, 4 years into American tobacco's invasion of the island, 40 percent of the boys and 26 percent of the girls said they had smoked.²¹⁶

SIDEBAR MATERIAL:

CROCIDOLITE TEARS

When evidence of the link between lung cancer and cigarettes was first reported in the early fifties, cigarette makers began pushing filters as way of making cigarettes more healthy without admitting they were unhealthy to begin with. In other words, you could smoke yourself to death while looking health conscious. Today, 95 percent of all cigarettes sold in America are filtered.²¹⁷ In 1952, Lorillard Inc. sold Kent's "Micronite" filter as "the greatest health protection in cigarette history," designed for "the smoker who is unusually sensitive to tobacco tars and nicotine." Lorillard claimed that Kent filters were made of the same material atomic energy plants used to filter microscopic pollutants from the air. What Lorillard didn't say was that the filters consisted largely of crocidolite, or "African blue" asbestos, the most hazardous of all asbestos minerals. Lorillard used crocidolite filters from 1952 to 1957 on more than 13 million Kents.²¹⁸ Now the company is defending itself against a series of lawsuits of smokers who are dying from-- or who have already died--from mesothelioma, a cancer that attacks the lining of the abdomen, chest cavity, lungs and heart. Lorillard claims it never knew of crocidolite's dangers, despite the fact that by the early 1950's, asbestos had been linked to respiratory cancer.²¹⁹

SIDEBAR MATERIAL

"ARE YOU IMPUGNING MY INTEGRITY"

In an effort to bolster their claims that tobacco couldn't hurt anyone, in the mid-50's the tobacco industry asked the public relations firm of Hill & Knowlton to set up The Council for Tobacco Research. To date, CTR has funded over 1,380 projects, to the tune of \$220 million. In 1994, the present head of the CTR, Dr. James Glenn, was called before the House Energy and Commerce subcommittee on the health and the environment. Dr. Glenn defended his honor and assured the committee that the tobacco industry was not paying for biased research, admitting only that the CTR had sometimes did circumvent their own advisory board to award grants to projects tobacco industry lawyers wanted funded. Dr. Glenn made these statements: "I reject the premise that we are a biased organization... No one has been able to demonstrate tht smoking causes any disease." When Dr. Glenn was asked if he believed that smoking is an addiction, he answered curtly, "No sir."²²⁰

SIDEBAR MATERIAL: BOYS WILL BE BOYS

"...a research arm of the tobacco industry had sponsored studies on the relationship between masculinity and smoking. (In a fascinating report on this research in a December 1959 issue of the respected journal *Science*, a report entitled 'Masculinity and Smoking.' According to the article, contrary to the rumor, it is "not strength but weakness of the masculine component" that is 'more frequent in the heavier smokers.' ...If, in fact, heavy smokers looked more like Princeton nerds than Marlboro men, why not use advertising imagery to make Princeton nerds *feel* like virile cowboys when they smoked?"²²¹

WHAT SMOKING COSTS:

HOSPITALS \$27 BILLION

DOCTORS \$16 BILLION

NURSING HOMES \$ 5 BILLION

PRESCRIPTIONS \$ 2 BILLION

HOME HEALTH CARE \$ 1 BILLION

TOTAL \$51 BILLION

COST PER PACK \$2.06

TAXPAYER BILL \$21.6 BILLION

Source: Centers for Disease Control and Prevention

WHO SMOKES?

Among Americans 18 and older:

SEX

Men 23.9%
Women 21%

RACE

White 22.9%
Black 25.1%
Hispanic 21.2%
Asia 14.4%

AGE

18-24 23.4%
25-44 25.6%
45-64 23.4%
65 + 11.7%

EDUCATION

Less than 12 years 29.1
More than 12 years 18.0

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