Tobacco Facts & Figures
2003

Great West Division
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Acknowledgements
The data for portions of this report have been provided through the cooperation of the local agencies listed. These agencies have been the primary contributors of cancer-related data specific to Utah, and this publication would not have been possible without their assistance. Tobacco Facts & Figures 2003 is designed to provide an overview of tobacco use and lung cancer in Utah and in no way replaces the need for reports by the other individual agencies.

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Tobacco-Related Diseases Kill Half of All Smokers

More than 20 years ago, a U.S. Surgeon General’s Report stated “Cigarette smoking is the major single cause of mortality in the United States.” This statement is as true today as when it was written in 1982. Tobacco causes many types of cancer, and when cancer statistics are combined with all smoking-related diseases, cigarette use kills half of all continuing smokers.

Tobacco-related cancer is a major public health problem in Utah, as well. To help make sense of tobacco use and related cancers, the American Cancer Society presents Tobacco Facts & Figures 2003. This publication provides benchmarks to measure progress toward the American Cancer Society’s challenge goals for major reductions in cancer deaths and incidence and improvement in quality of life for cancer survivors. It is our hope that it will also assist American Cancer Society volunteers and staff, local community groups, health professionals, and others in providing educational programs and informational services to the public, cancer patients, and their families.

For more information you can trust about tobacco-related cancer, contact the American Cancer Society at 1.800.ACS.2345, or visit our website at www.cancer.org

“I Found New Ways to Cope”
Kristina Lehrer
Age 30
Former Cigarette Smoker
Salt Lake City, Utah

When Kristina Lehrer started smoking at age 18, she was rebelling against the world around her—as many young adults do. Still, at 28, when Kristina looked back over her life as a smoker, she found that her smoking habit evolved from rebelling and had turned into a way of dealing with anxiety and stress.

As a registered nurse, Kristina the warning signs associated with smoking were glaring. “It was tough to see the results of smoking. Everyday I would see people who were sick from chronic lung disease. It was difficult,” she said.

Although Kristina never really enjoyed smoking, cigarettes had turned into a serious addiction. But it was finally Kristina’s desire to kick the habit that overcame her need to use cigarettes as a stress-buster. “I told myself that I would never be a long-term smoker,” Kristina said. Yet, after 10 years of smoking, kicking the habit was more difficult that she ever imagined.

“I tried to quit four times before I was successful,” she said. “For me, it was hard to quit because smoking...I smoked when I was upset or anxious. I was like a child, and I needed to learn how to handle my feelings all over again.”

Kristina finally conquered her addiction to cigarettes, and offers the following advice to people who smoke to relieve stress. “I learned that it’s okay, as a non-smoker, to take a five- to 10-minute break to get away. I often go outside now—for the alone time—without the cigarettes.”

Quitting smoking is tough, but well worth the challenge, according to Kristina. She said, “When you are truly ready to quit, you can do it. It’s tough, but if I can do it, you can, too!”

“Quit Making Excuses, and Just Do It”
Joed and Ruth Hendrickson
Ages 44 and 41, respectively
Former Smokers
Salt Lake City, UT

Joed Hendrickson was only 12 years old when he lit his first cigarette. Just a teenager himself, Joed’s older brother was the main influence in getting him hooked on smoking. “My brother didn’t want to smoke by himself,” said Joed, “so he made me smoke with him. If he got caught, we’d both get into trouble.”

More than 30 years of smoking had given Joed chronic lung disease, and he has been permanently disabled because of it. Yet he loved everything about smoking, especially the taste and the high the cigarettes brought him. Even after contracting a life-threatening illness, Joed didn’t want to quit, but his wife Ruth finally persuaded him to kick the habit for good.

Ruth also had been a long-term smoker, and she had worked hard to triumph over her nicotine addiction. “I got tired of seeing my husband go in and out of hospitals, using respirators to breathe,” she said. “One day, when Joed was in the hospital, I decided that I had to quit.” She made up her mind that day that her health was more important than smoking, and it was only a year later that she finally convinced her husband to follow suit.

Joed decided to take Ruth’s advice, but says that it was extremely difficult for him to quit. In fact, he tried at least five times before he was successful. “I’d use any excuse to have a cigarette,” he said.

After a lot of hard work and commitment to being smoke-free, Joed was able to end his dependence on cigarettes. Today, he’s been free of cigarettes for almost three years. “It feels wonderful. I feel healthy, I don’t stink, and I can breathe again!”

Joed offers some advice for those who want to stop smoking: “Quit making excuses, and just do it!” Ruth adds, “If you want to be around and healthy in the future, you need to do it now.”
Adult Tobacco Use in Utah is Decreasing

Smoking Behavior:
In Utah, from 1996 to 2002, the percentage of male smokers who reported smoking every day decreased from 15.4% in 1996 to 10.9% in 2002. The percent of female smokers who reported smoking every day decreased from 11.3% in 1996 to 9.0% in 2002 (Figure 1).

Smokeless Behavior:
In 2002, 2.3% of men in Utah reported current daily use of any smokeless tobacco products such as chewing tobacco or snuff (Figure 2).

Smoking During Pregnancy:
Tobacco has proven damaging effects on women’s health and is associated with increased risk of miscarriage, preterm delivery, stillbirth, and infant death. Smoking during pregnancy is a cause of low birth weight in infants. In fact, smoking during pregnancy is responsible for 17.0% to 26.0% of low-weight births (< 2500 g), and has been identified as the single largest modifiable risk factor for low-birth weight (1).

In 2002, 7.5% of pregnant Utah women smoke compared to 12.0% nationally, and the State is ranked 5th (1=low) in terms of maternal smoking during pregnancy (Figure 3). It is estimated that each year, smoking during pregnancy negatively affects 3,500 births in Utah equating to health-related costs of $4.0 million dollars annually (2).
Youth Tobacco Use in Utah

Studies show that the younger people begin to smoke, the more likely they are to be smokers as adults. In fact, nearly all first use of tobacco occurs before high school graduation. Youth tobacco addiction is similar to that of adults in most every way. Children and adolescents who smoke develop coughs, produce phlegm, have more respiratory illnesses, poorer physical fitness, increased risk for cardiovascular disease, and decreased lung growth and function. Furthermore, young people are the chief source of new consumers for the tobacco industry, which each year, must replace the many consumers who quit smoking and those who die from smoking-related diseases.

In Utah in 2001, 8.3% of high school students reported smoking (Figure 4) and 6.7% of high school males reported using smokeless or spit tobacco. In addition, 43,500 kids were exposed to secondhand smoke at home. The percent of students in Utah who tried cigarette smoking, even one or two puffs was 34.1% for males and 26.8% for females in 2001 (Figure 5). This is a decrease from 1991.

**Figure 4**

Percentage of Utah high school students who used any tobacco during the past 30 days, 1999-2001

**Figure 5**

Percentage of Utah high school students who ever tried cigarette smoking, Utah, 1991-2001

Source: Youth Risk Behavior Survey, Utah.

Youth Risk Behavior Survey is conducted on a biennial/every other year basis.
Youth Tobacco Use in Utah

The percent of male students who reported chewing tobacco or snuff on one or more of the past 30 days decreased during the period from 1995 to 2001 (Figure 6). In addition, 6.0% of male students and 2.1% of female students reported smoking cigars, cigarillos, or little cigars on one or more of the past 30 days in Utah in 2001 (Figure 7).

It is estimated that around 38,000 kids under the age of 18 and alive in Utah will ultimately die prematurely from smoking.
What is Lung Cancer?

Cancers are a group of diseases that cause cells in the body to change and grow out of control. Most types of cancer cells form a lump or mass called a tumor, and are named after the body part where the tumor first starts. Most lung cancers start in the lining of the bronchi (airways) but they can also begin in the trachea (windpipe), bronchioles (small airways), or alveoli (air sacs). Lung cancer often takes many years to develop.

The seriousness of a lung cancer diagnosis is influenced by its stage, meaning how far the cancer has spread on initial diagnosis. Lung cancer is very difficult to detect when it is localized, in the earliest, most treatable stage. Local stage describes cancers confined to the lung. As the cancer grows, cancer cells can break away and spread to other parts of the body in a process called metastasis. Regional stage describes cancers that have spread to the lymph nodes. Distant stage cancers have metastasized or spread to distant sites. Lung cancer is often a life-threatening disease because it is often discovered after it has spread in this way, when it becomes very difficult to treat successfully.

Bottom Line:

Lung cancer is the leading cause of cancer death for both men and women (3).

Nationally, about 87.0% of lung cancer deaths are caused by smoking, and it accounts for approximately 6.0% of all deaths in the United States each year. More people die of lung cancer than of colon, breast, and prostate cancers combined (4).

Lung cancer is the most common cancer in the world, even though it is preventable in most cases. People who have smoked all their lives have a lung-cancer risk 20-30 times greater than non-smokers. However, for individuals who quit smoking, the risk of lung cancer decreases every year they remain non-smokers (5).

In the United States, cigarette smoking alone causes approximately 30.0% of cancer deaths. In addition to lung cancer, each year, cigarette smoking is responsible for 64,735 deaths due to chronic obstructive lung disease and 81,976 deaths due to coronary heart disease. Nationally, every year, an estimated $157 billion in health-related economic losses are attributable to smoking. In Utah, this means that each year $273 million dollars is spent on indirect health care costs linked to tobacco usage (6).

Cancer Burden:

In 2003, there will be about 171,900 new cases of lung cancer in the United States: 91,800 among men and 80,100 among women. About 157,200 people will die of this disease: 88,400 men and 68,800 women. It is expected that 500 persons will develop lung and bronchus cancer in Utah in 2003.
Lung Cancer is Usually Detected Late and is Deadly

**Bottom Line:**

Most patients who receive an initial diagnosis of lung cancer have advanced stage disease, making it more difficult to treat. In contrast, individuals with early stage disease are more likely to be treated effectively using surgical procedures.

**Men Have Higher Risk:**

In general, men have higher risk of and mortality from lung cancer than women. In Utah during the period from 1990 to 2000, the average incidence rate of lung cancer was more than two fold higher for males than for females (45.0/100,000 and 21.1/100,000 for males and females respectively) (Table 1). This was also true within each health district. Compared to the US, Utah had significantly lower incidence rates of lung cancer during the same time period (89.9/100,000 and 50.5/100,000 for US males and females respectively).

### Table 1

**Age-adjusted Incidence Rates (per 100,000 pop.) for Lung Cancer, by Gender, for Utah, Utah Health Districts, and the US, 1990-2000 (Standard population is 2000.)**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Incidents</td>
<td>Number of Incidents</td>
</tr>
<tr>
<td>Bear River</td>
<td>103</td>
<td>679,263</td>
</tr>
<tr>
<td>Central Utah</td>
<td>120</td>
<td>328,716</td>
</tr>
<tr>
<td>Davis County</td>
<td>257</td>
<td>1,187,342</td>
</tr>
<tr>
<td>Salt Lake Valley</td>
<td>1,303</td>
<td>4,554,574</td>
</tr>
<tr>
<td>Southeastern Utah</td>
<td>126</td>
<td>284,420</td>
</tr>
<tr>
<td>Southwest Utah</td>
<td>301</td>
<td>618,621</td>
</tr>
<tr>
<td>Summit County</td>
<td>27</td>
<td>132,170</td>
</tr>
<tr>
<td>Tooele County</td>
<td>81</td>
<td>174,038</td>
</tr>
<tr>
<td>TriCounty</td>
<td>92</td>
<td>212,154</td>
</tr>
<tr>
<td>Utah County</td>
<td>279</td>
<td>1,730,972</td>
</tr>
<tr>
<td>Wasatch County</td>
<td>11</td>
<td>68,897</td>
</tr>
<tr>
<td>Weber-Morgan</td>
<td>368</td>
<td>1,014,256</td>
</tr>
<tr>
<td>Utah</td>
<td>3,068</td>
<td>10,985,423</td>
</tr>
<tr>
<td>U.S.</td>
<td>99,080</td>
<td>136,611,159</td>
</tr>
</tbody>
</table>

Similarly, more men die of lung cancer than women in Utah (37.9/100,000 and 16.7/100,000 for males and females respectively) (Table 2). Men also had a higher mortality from lung cancer than women in each of the twelve health districts in Utah.

Interestingly, both the incidence and mortality rates of lung cancer vary significantly according to the Health District. For females, Summit County had the lowest incidence and mortality rates among all Health Districts, while for males, Wasatch County had the lowest incidence and mortality rates.

### Table 2

**Age-adjusted Mortality Rates (per 100,000 pop.) for Lung Cancer, by Gender, for Utah, Utah Health Districts, and the US, 1990-2000 (Standard population is 2000)**

<table>
<thead>
<tr>
<th>District</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Deaths</td>
<td>Number of Population</td>
</tr>
<tr>
<td>Bear River</td>
<td>77</td>
<td>678,708</td>
</tr>
<tr>
<td>Central Utah</td>
<td>108</td>
<td>327,344</td>
</tr>
<tr>
<td>Davis County</td>
<td>203</td>
<td>1,192,594</td>
</tr>
<tr>
<td>Salt Lake Valley</td>
<td>1,040</td>
<td>4,505,917</td>
</tr>
<tr>
<td>Southeastern Utah</td>
<td>107</td>
<td>284,856</td>
</tr>
<tr>
<td>Southwest Utah</td>
<td>255</td>
<td>623,355</td>
</tr>
<tr>
<td>Summit County</td>
<td>18</td>
<td>130,099</td>
</tr>
<tr>
<td>Tooele County</td>
<td>67</td>
<td>176,148</td>
</tr>
<tr>
<td>TriCounty</td>
<td>65</td>
<td>211,789</td>
</tr>
<tr>
<td>Utah County</td>
<td>252</td>
<td>1,710,334</td>
</tr>
<tr>
<td>Wasatch County</td>
<td>7</td>
<td>69,412</td>
</tr>
<tr>
<td>Weber-Morgan</td>
<td>303</td>
<td>1,005,752</td>
</tr>
<tr>
<td>Utah</td>
<td>2,531</td>
<td>10,985,423</td>
</tr>
<tr>
<td>U.S.</td>
<td>77,582</td>
<td>136,611,159</td>
</tr>
</tbody>
</table>

People Live Longer if They Quit Smoking

More than one-half of men who continue to smoke will die during middle age compared with 22.0% of never smokers and 23.0% of former smokers who quit before age 40. Similarly, for women the risk of death is higher in women who currently smoke (25.0%) compared to those who have never smoked or quit before age 40 and remain non-smokers (15.0%) (Figure 8). People who stop smoking at younger ages experience the greatest health benefits from cessation; those who quit by age 35 avoid 90.0% of the risk attributable to tobacco (7). However, even smokers who quit after age 50 substantially reduce their risk of premature death. It is absolutely untrue that it is too late to quit smoking because the damage has already been done.

Screening for Lung Cancer:

Past screening studies have shown that using chest X-ray and sputum cytology have not been effective methods for early diagnosis in individuals who received screening. However, newer studies using low-dose spiral CT (LDCT) are showing promising results of detecting lung cancer at an earlier stage (nodules as small as 5mm versus 10mm for chest X-ray). It is hoped that further research will find that CT screening may improve survival and decrease mortality from lung cancer as a result of earlier detection (8). For more information about this clinical trial, contact your American Cancer Society at 1.800.ACS.2345, or visit our website at www.cancer.org.

Reasons to Quit Smoking:

More Americans are killed by cigarettes than alcohol, car accidents, suicide, AIDS, homicide, and illegal drugs combined. And because cigarette smoking and tobacco use is an acquired behavior that individuals choose, smoking is the most preventable risk factor leading to premature deaths in our society. Besides being the biggest cause of lung cancer, smoking is also a major cause of heart disease, bronchitis, emphysema, and stroke, and contributes to the severity of colds and pneumonia. Furthermore, secondhand cigarette smoke has a harmful effect on those around the smoker.
Health benefits of quitting smoking include:

• Smokers who quit, regardless of age, live longer than people who continue to smoke.
• Smokers who quit before age 50 have half the risk of dying in the next 15 years compared with those who continue to smoke. Those who quit by age 35 avoid 90.0% of the risk attributable to tobacco.
• Quitting smoking substantially decreases the risk of cancer of the lung, larynx, pharynx, esophagus, mouth, colon, pancreas, bladder, and cervix.
• Quitting smoking reduces the risk of other major diseases including coronary heart disease, lung diseases, and cardiovascular disease.

Besides these direct health benefits, there are many other important reasons to quit smoking or end a dependence on other forms of tobacco (6):

• Escaping the high cost of addiction ($1,800-$3,000 saved annually, assuming a pack-a-day habit)
• Eliminating tobacco exposure of the fetus during pregnancy and during childhood
• Living long enough to achieve certain ambitions and lifetime milestones
• Avoiding abandonment of one’s spouse and family due to premature death
• Ending the embarrassment of being dependent
• Providing a positive example for children and others
• Reducing the fear of the diseases caused by smoking

Did you know? About one third of the male adult global population smokes
Early Diagnosis of Lung Cancer Improves Survival

In Utah, in the period 1993-1997, 14.6% of all cases of lung cancer were alive after five years of diagnosis. Patients with localized tumors had the highest five-year relative survival (54.7%) followed by those whose cancer spread regionally (13.5%). Only 0.2% of cases of lung cancer with distant metastasis were alive after five years of diagnosis. Compared to the US, cases of lung cancer in Utah had lower survival rates during the same period (Figure 9).

Did you know? Half of long-term smokers will die from tobacco. Every cigarette smoked cuts at least five minutes of life on average—about the time taken to smoke it.

Programs to Help Smokers Quit Are Cost Effective

Programs designed to help smokers quit provide large health benefits at a relatively low cost. An analysis of the cost effectiveness of implementing the 1996 Agency for Health Care Policy and Clinical Practice Guideline for cessation (9) revealed that cost-per-quality-adjusted-life-year-saved ranged from $1,108 to $4,542 (10). These calculations do not take into account the higher costs of medical care and hospitalization among smokers compared to non-smokers. Savings from reduced healthcare costs would probably pay for effective cessation interventions within three to four years. Thus, growing evidence suggests that employer-sponsored and government-funded health plan coverage of counseling and pharmacotherapy to help patients quit smoking is beneficial from both a cost and health perspective (11,12).
Programs to Help Smokers Quit Are Cost Effective

**Did you know?** About 15 billion cigarettes are sold daily—or 10 million every minute.

**Smoking is a True Addiction:**

Stopping smoking represents the single most important step that smokers can take to enhance the length and quality of their lives. However, quitting smoking is difficult. Tobacco use is a true addiction, similar to the dependence caused by opiates, amphetamines, and cocaine (9). Furthermore, tobacco dependence is a chronic condition that often requires repeated clinical intervention, just like other addictive disorders.

Figure 10 shows the percent of current Utah smokers who reported a quit attempt in the past 12 months. Repeated attempts, multiple approaches, and ongoing support are essential to quitting for good. But the difficulty in quitting is worth the end result. Ex-smokers enjoy a higher quality of life with fewer illnesses from cold and flu viruses, better self-reported health status, and reduced rates of bronchitis, pneumonia and cancer.

**Key Factors for Quitting Smoking**

**Physician intervention:** Even brief counseling by a physician or other health care professional can effectively help smokers to quit (13). Health care provider counseling may be as simple as advising a smoker to quit, or as complex as using computers to tailor the intervention to the individual smoker. Physician counseling motivates individual smokers to consider the ill effects of smoking and to change. However, most smokers cannot stop without more intensive help.

More than 70.0% of smokers visit a doctor each year. However, only 33.0% of all adults who talked to a doctor or health care professional within the previous year were asked if they smoked or used tobacco (14). In Utah in 2002, 71.8% of all current smokers (66.5% of male smokers and 75.7% of female smokers) who saw a health professional in the past 12 months reported having been advised to quit smoking (Figure 11).

**Drug therapy:** There are five first-line, FDA-approved drug therapies for tobacco dependence: an oral sustained-
### Key Factors for Quitting Smoking

release medication called Bupropion Hydrochloride (Zyban	extsuperscript{®}), nicotine gum, nicotine inhaler, nicotine nasal spray, and nicotine patch (see Table 3). The evidence is strong and consistent that pharmacologic treatments can help people to quit smoking (10,15). In addition, it appears that many smokers trying to quit by using over-the-counter cessation aids (i.e., nicotine patches and gums) are not using these products appropriately. This makes successful quitting more difficult (16).

**Counseling:** Counseling and behavioral therapies can be especially effective in treating tobacco dependence. This includes practical counseling in problem-solving skills and social support. Counseling can be provided by telephone or in individual group settings. These therapies achieve long-term abstinence in 12%-18% of smokers in a single quit attempt (17). In Utah, the American Cancer Society provides referrals to free or low-cost tobacco cessation programs. For more information about this program, call 1.800.ACS.2345. For additional free cessation services you may also contact the Utah Quit Line at 1.888.567.TRUTH or the Quit Net at www.utah.quitnet.com.

Despite the availability of effective therapies to help people quit smoking, recent data show that these are not used as much as they could be...Most people who attempt to quit smoking cite “will power” alone to decrease the number of cigarettes smoked, or they quit “cold turkey” See Table 3 for various quitting methods and options that can be incorporated into your attempt to achieve a tobacco free lifestyle.

**Did you know?** Cigarettes cause more than one in five American deaths.

### Recommended Pharmacotherapies for Smoking Cessation

<table>
<thead>
<tr>
<th>Pharmacotherapy</th>
<th>Duration</th>
<th>Cost per Day (in 2000)</th>
<th>Estimated Abstinence Proportion(^*) (95% C.I.(^†))</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First line (FDA approved):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bupropion (Zyban	extsuperscript{®}):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is an (non-nicotine based) antidepresant. This drug can help to reduce nicotine withdrawal symptoms and the urge to smoke. Some common side effects are dry mouth, difficulty sleeping, dizziness, and skin rash. Contraindicated if History of Seizure. Availability: Prescription only with a doctor consultation</td>
<td>7-12 weeks maintenance up to 6 months</td>
<td>$3.33</td>
<td>30.5 (23.2, 37.8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nicotine gum:</strong></td>
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<tr>
<td>Chewing gum releases nicotine into the bloodstream through the lining of the mouth. Nicotine gum might not be appropriate for people with temporomandibular joint disease or for those with dentures or other dental work. Up to 2 mg dose if less than 25 cigarettes/day; 4 mg dose if &gt;= 25 cigarettes/day Availability: Over the counter (OTC)</td>
<td>Up to 12 weeks</td>
<td>$6.25 for 10 (2-mg pieces) $6.87 for 10 (4-mg pieces)</td>
<td>23.7 (20.6, 26.7)</td>
</tr>
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<td></td>
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<tr>
<td><strong>Nicotine inhaler:</strong></td>
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<tr>
<td>This device delivers a vaporized form of nicotine to the mouth through a mouthpiece attached to a plastic cartridge. Most of the nicotine travels to the mouth and throat, where it is absorbed through the mucous membranes. Common side effects include throat and mouth irritation and coughing. Anyone with bronchial problems should use it with caution. Availability: Prescription only with a doctor consultation</td>
<td>Up to 6 months</td>
<td>$10.94 for 10 cartridges</td>
<td>22.8 (16.4, 29.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nicotine nasal spray:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The spray comes in a pump bottle containing nicotine that tobacco users can inhale when they have an urge to smoke. This product is not recommended for people with nasal or sinus conditions, allergies, or asthma, nor is it recommended for young tobacco users. Availability: Prescription only with a doctor consultation</td>
<td>3-6 months</td>
<td>$5.40 for 12 doses</td>
<td>30.5 (21.8, 39.2)</td>
</tr>
</tbody>
</table>

Table 3
**Recommended Pharmacotherapies for Smoking Cessation**

<table>
<thead>
<tr>
<th>Pharmacotherapy</th>
<th>Duration</th>
<th>Cost per Day (in 2000)</th>
<th>Estimated Abstinence Proportion* (95% C.I.†)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nicotine patch:</strong> It supplies a steady amount of nicotine to the body through the skin. The nicotine patch is sold in varying strengths as an 8-week smoking cessation treatment. Nicotine doses can be regularly lowered as the treatment progresses or given as a steady dose during treatment. The nicotine patch may not be a good choice for people with skin problems or allergies to adhesive tape. Availability: Either over the counter (OTC) or by prescription with a doctor consultation</td>
<td>4 weeks then 2 weeks then 2 weeks 8 weeks</td>
<td>$4.22 $4.51</td>
<td>17.7 (16.0, 19.5)</td>
</tr>
<tr>
<td><strong>Second-line (not FDA approved): Clonidine:</strong> There is evidence to suggest that it is also capable of improving smoking cessation rates. Although clonidine may reduce craving for cigarettes after cessation, it does not consistently ameliorate other withdrawal symptoms. Unpleasant side effects appear common with clonidine use. Availability: Prescription only for both the patch and oral formulation</td>
<td>3-10 weeks</td>
<td>$0.24 for 0.2 mg (oral formulation) $3.50 (for a patch)</td>
<td>25.6 (17.7, 33.6)</td>
</tr>
<tr>
<td><strong>Nortriptyline:</strong> There is evidence to suggest that this drug is also effective in smoking cessation. However, this form of anti-depressant produces a number of side effects, including sedation and dry mouth. Availability: Prescription only with a doctor consultation</td>
<td>12 weeks</td>
<td>$0.74 for 75 mg</td>
<td>30.1 (18.1, 41.6)</td>
</tr>
</tbody>
</table>

*The estimated abstinence proportion was derived from a statistical meta-analysis of published studies. All these studies had at least five months of follow-up after the quit attempts and included a placebo group.
†Confidence Interval (C.I.): A range of possible values for the estimated proportion. A 95% CI will contain the true value 95 out of 100 samples surveyed. A 95% CI is commonly reported.
Sources: The information contained in this table provides a briefly descriptive and was adapted from the published medical articles.[8] The prices were based on retail prices at a national chain pharmacy, located in Madison, Wisconsin, April 2000.
Tobacco, the Law and Policy

Illegal Purchases by Youth:

The rate of tobacco sales to youth (18 years and younger) during tobacco retailer compliance checks has continuously decreased since 2001 when it was 16.9%. In 2003, the rate had decreased to 7.9% meaning fewer youth had gained access to tobacco products (Figure 12).

Taxes on Cigarettes:

Utah’s excise tax is 69.5 cents per pack. Nationally, the average tax per pack is 70.5 cents; Utah ranks 23rd out of the 50 states. In 2001, Utah had a smoking rate of 8.3% for youth (18) and 13.2% of Utah adults (19). Research shows conclusively that higher prices for cigarettes reduce consumption; for example, a price increase of 10.0% decreases overall tobacco use by approximately 4.0% (20). The decrease is significantly higher among youth and individuals of lower socio-economic status (21).

Low State Funding for State Tobacco Control Initiatives

Utah received approximately $28.6 million this fiscal year as a result of the Master Settlement Agreement with the tobacco industry. The Centers for Disease Control and Prevention (CDC) recommends that Utah should allocate between $15.2 million and $33.4 million in state funding to enact an effective, comprehensive tobacco prevention program. However, Utah has only budgeted $4 million from the Master Settlement Agreement, total funding from all sources for tobacco prevention and control was $9.4 million for these initiatives in 2003-2004 (22).

Did you know? 2.8 million packs of cigarettes are bought or smoked by kids in Utah each year.

Reducing tobacco use, providing education on cessation options, reducing youth access, utilizing effective methods to reduce illegal tobacco purchases by youth and increasing the percentages of money that the state of Utah spends on tobacco initiatives will improve the health and welfare of the citizens of Utah now and in years to come. It is difficult to fight any addiction, and smoking is no different.

However, the proof that it can be done lies with the more than 40 million Americans who have successfully quit smoking. As Kristina says, “If I can do it, you can too!” Start today and make this year the one in which you take back the control of your life and of your health.

If you want to quit smoking and need help, talk with your health care provider or call the American Cancer Society at 1.800.ACS.2345. They can provide you with current information, advice, and suggestions for beginning the end of your tobacco use. Don’t wait...do it today!

![Percent of tobacco retailers who sold tobacco to youth (ages 18 and younger) during compliance checks, Utah, 2001-2003](image-url)
Data Sources

Cancer incidence and survival data are based on cases reported to each state’s Central Cancer Registry (CCR) and the underlying cause of death reported by each state’s Office of Vital Statistics. U.S. mortality rates are from the Bureau of Vital Statistics. Central Cancer Registries (CCRs) are legally mandated, statewide, population-based cancer information centers. Analyses were performed by the registries. All rates are age-adjusted to the 2000 U.S. standard population. More detailed information on the status of cancer in each state is available from the state’s CCR.

Risk factor data have been drawn from each state’s Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Survey (YRBS), both of which are conducted as collaborations between the Centers for Disease Control and Prevention, and state departments of health or education. For states that did not have overall response rates of at least 60 percent on the Youth Risk Behavior Surveys, the data were un-weighted. Utah's data included in this publication are weighted. The BRFSS is an annually conducted survey, whereas the YRBS is biannual or every other year conducted survey.

Definitions and Abbreviations

**SEER summary stage definitions** - Stage of disease information is obtained from extent of disease information. The historical stage presented has four levels. An invasive neoplasm confined entirely to the organ of origin is said to be localized. An invasive neoplasm that has extended beyond the limits of the organ of origin is said to be regional. An invasive neoplasm that has spread to parts of the body remote from the primary tumor either by direct extension or by discontinuous metastasis is said to be distant. In addition, when information is not sufficient to assign a stage, an invasive neoplasm is said to be un-staged.

**Relative Survival Rate**: The relative survival rate is the survival rate observed for a group of cancer patients compared to the survival rate of persons in the general population who are similar to the patient group with respect to age, gender, race, and calendar year of observation. Relative survival adjusts for normal life expectancy (factors such as dying from accidents or other diseases). Five-year relative survival rates include persons who are still living five years after diagnosis, whether in treatment, remission, or disease-free.

ACS: American Cancer Society
BRFSS: Behavioral Risk Factor Surveillance System
CCR: Central Cancer Registry
CDC: Centers for Disease Control and Prevention
NCI: National Cancer Institute
RMD: Rocky Mountain Division
SEER: NCI Surveillance, Epidemiology, and End Results Program
YRBS: Youth Risk Behavior Survey

Understanding Cancer Incidence & Mortality Rates

Cancer rates in this document represent the number of new cases of cancer per 100,000 population (incidence) or the number of cancer deaths per 100,000 population (mortality), during a specific time period.

Rates provide a useful way to compare cancer burden irrespective of the actual population size. Rates can be used to compare geographic areas such as your county to the state as a whole, or to the entire United States.

Age-Adjusted Rates

Older age groups generally have higher cancer rates than younger age groups. Age-adjustment eliminates the effect of age when making comparisons. Beginning with data year 1999, agencies have adopted the 2000 projected U.S. population as a new standard for adjusting incidence and mortality rates. All the incidence and mortality rates presented in this booklet have been adjusted to the 2000 population standard.
Footnote Reference List

Utah Offices and Units

Rocky Mountain Region
Headquarters
2255 S. Oneida St.
Denver, CO  80224
303.758.2030

Greater Salt Lake
941 East 3300 South
Salt Lake City, UT  84106
801.483.1500

Central
255 E. 930 S.
Orem, UT  84058
801.373.5886

South Central
819 Palisade Rd., Box 650099
Sterling, UT  84665
435.835.6351

Northern
2404 Washington Blvd., #218
Ogden, UT  84401
801.393.8657

Southern
567 S. Valley View Dr., #204
St. George, UT  84770
435.674.9707

The American Cancer Society is the nationwide community-based voluntary health organization dedicated to eliminating cancer as a major health problem by preventing cancer, saving lives and diminishing suffering from cancer through research, education, advocacy, and service.