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Tobacco Control in South Africa

In 1996 South African Minister of Health Dr. Nkosazana Zuma was ready to restructure and strengthen the government's tobacco control program. Zuma was a pediatrician and long-time leader in the African National Congress (ANC), the left-leaning, anti-apartheid political party founded to increase the rights of Black South Africans. Nelson Mandela appointed Zuma minister of health in 1994 after he became president.

South Africa's powerful tobacco industry, with longstanding ties to the apartheid administration, had helped to keep South African government tobacco control policies weak. At the time of Zuma's appointment, South Africa had one of the highest rates of smoking in the developing world. With new, post-apartheid health policies that emphasized health promotion and a strong tobacco control research and advocacy community to guide her, Zuma wondered what the comprehensive national tobacco control program should look like and how she would put it into place.

Overview of South Africa

The area of present day South Africa has been populated for several millennia. Early inhabitants included hunter-gatherers (San), pastoralists (Khoikhoi), and mixed-farmers originating from Botswana (Africans).¹ European settlement began in 1652 when the Dutch established an outpost of the Dutch East India Trading Company in Cape Town. They brought in slaves from East Africa, Madagascar, and the East Indies,² displacing Khoi pastoralists who eventually were decimated by settlers' diseases.³

The British seized the Cape of Good Hope in 1806, leading many of the Dutch settlers (who came to be known as the Boers) to travel north.⁴ The British brought indentured servants from India to South Africa to work on sugar plantations and to assist with mining after the discovery of diamonds in 1867 and gold in 1871.¹ The precious minerals brought increased wealth and immigration, as well as the subjugation of indigenous populations.^{4, 5}

The Boers and British settlers disputed over land, political rule, and the use of indigenous labor, culminating in the Boer War in 1899. In 1902 both groups signed the Treaty of Vereeniging, which brought

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the Boers (who came to be known as Afrikaners) under Britain's sovereignty.¹ The British ruling government created segregation policies to limit Black African participation in the economy and to prevent political opposition.³ The Mines and Works Act of 1911 reserved skilled, better paying positions for Whites, and in 1913 the Natives' Land Act divided South Africa into 'White' and 'Black' areas; Black Africans were restricted to residing in smaller townships.⁵

Divisions among Afrikaner and British settlers persisted, and in 1914 Afrikaner Nationalists split from the ruling South African Party and created the National Party (NP). The NP, strongly connected to the Afrikaners, won the general election in 1948 and made apartheid (meaning "separation") the official policy of the government. In 1961 South Africa seceded from the British Commonwealth and became a republic.

The African National Congress (ANC), a national organization founded in 1912 in response to racial discrimination, advocated for a more democratic and unified South Africa to end apartheid. The government used violence to quell anti-apartheid efforts. Anti-apartheid leaders were convicted unlawfully and imprisoned, tortured, or killed while some fled the country to escape persecution.²

By 1976 the anti-apartheid movement was fully established, and in the 1980s international attention and resistance to apartheid increased; the United Nations (UN) and countries around the world instituted economic and trade sanctions.² With global pressure, President FW de Klerk removed the ban on liberation movements in 1990 and released political prisoners, including Nelson Mandela. The government began negotiating with anti-apartheid groups, and in 1994 South Africa had its first democratic election. The ANC won the majority of the votes, and Nelson Mandela was elected President of South Africa.⁵

The ANC led a Government of National Unity (GNU) that included members from the NP and the Inkatha Freedom Party (IFP). The GNU operated under an interim constitution while drafting a new, democratic one.⁶ In 1994 the GNU's bicameral legislature passed the ANC's Reconstruction and Development Plan (RDP), a policy framework promoting development as well as social and economic change in South Africa.

The Constitutional Court approved the new Constitution of the Republic of South Africa, which incorporated key national principles, at the end of 1996. The constitution defined South Africa as a democratic, independent republic based upon the principles of protecting individual dignity, human rights, and the rule of law. It divided the country's four provinces into nine provincial governments and 284 municipalities.⁷ Pretoria was the administrative capital, Cape Town the legislative capital, and Bloemfontein the judicial capital.

Demographics

South Africa had a landmass of 1.2 million square kilometers (km); the Great Escarpment, which consisted of many single mountain ranges, separated South Africa's interior plateau from the Atlantic Ocean on the west and the Indian Ocean on the east.⁸ Neighboring countries included Namibia to the northwest, Botswana and Zimbabwe to the north, and Mozambique and Swaziland to the northeast (see **Exhibit 1** for map). South Africa completely surrounded Lesotho, one of the smallest countries in Africa. Average annual rainfall fluctuated, and droughts were common.³ South Africa had a relatively developed infrastructure that included roads, railways, airports, and ports. Of the 331,265 km of highways, 41% were paved; neighboring Namibia had 64,000 km of roads, 10% of which were paved.⁸

In 1995 South Africa had a population of 41.4 million people, with an annual population growth rate of 1.32%. Fifty-five percent of the population lived in urban areas, where the annual population growth rate was 2.61%.^{9, 10} South Africa's population was 75.2% Black African; 13.6% White; 8.6% Colored or mixed race people, which included people of Khoisan, Malaysian, Griqua, Indian, and Chinese origin; and 2.6% Indian.⁵

⁸ Sixty-eight percent of South Africans practiced Christianity, 28.5% identified with traditional and animistic beliefs, and the remaining 3.5% were Muslims and Hindus.⁸ There were 11 official languages and several unofficial languages.^{8, 11}

Industrial and service sectors accounted for 95% of gross domestic product (GDP) and 85% of employment, while agriculture made up 5% of GDP and 30% of the labor force.⁸ In 1995, 0.01% of agricultural land was used to grow tobacco.¹² South Africa ranked fifth in the world in 1994 in terms of diamond suppliers, supplying 9.9% of all diamonds.

Unemployment decreased from 45% to 20% between 1992 and 1996,¹³ yet, with 20% of the population unemployed, South Africa had one of the higher unemployment rates in the world.^{8, 13} Black Africans were disproportionately unemployed, with estimates as high as 36.2% in 1995. That same year, the estimated White unemployment rate was only 4.6%.¹⁴ Right before the end of apartheid, over 60% of Black Africans were living below the national poverty line compared to just 1% of Whites.¹⁵ Seventy-five percent of those living below the poverty line lived in rural areas, and women and children were disproportionately represented among the poor.¹⁶

Basic Socioeconomic and Demographic Indicators¹

INDICATOR		YEAR
UN Human Development Index ranking	89 out of 174	1996
Population (thousands)	41,375	1995
Urban population (%)	54.5	1995
Drinking water coverage (%)	84	1995
Poverty rate (% living on less than USD 1.25 per day)	21	1995
Gini index	57	1995
GDP per capita in PPP (constant 2005 international dollar)	7,497.00	1996
GDP per capita in constant 2000 USD	3,020.00	1996
Literacy (% total, % female, % male)	82.4, 80.9, 84.1	1996

Health in South Africa

Infectious Diseases HIV prevalence increased from 0.7% in 1990 to 4.0% in 1993 and 14.2% in 1996, with prevalence varying greatly across provinces.¹⁷ In 1995 tuberculosis (TB) was the most serious preventable cause of chronic lung disease, and rates were increasing; national incidence was 311 TB cases per 100,000 people. Among the Colored population, incidence was 713; Black African, 207; Asian, 51; and White, 19. The government predicted that 25% of new TB cases were attributable to HIV.¹⁸

Maternal and Child Health Infant mortality was 45 deaths per 1,000 live births and varied by race; the mortality rates for African, Colored, and Whites under five years old per 1,000 live births were 47, 18, and 11, respectively.⁵ Maternal mortality showed equivalent inequities by race.

¹ This data was comprised from the following sources: UN, UNICEF, World Bank, United Nations Education, Scientific and Cultural Organization (UNESCO).

Chronic Diseases In 1999 chronic diseases of lifestyle, such as ischemic heart disease (IHD), stroke, diabetes, and smoking-related diseases, accounted for 24.5% of reported deaths (see **Exhibits 2a** and **2b** for top causes of death for males and females in South Africa in 1996).¹⁹ Half of deaths from cardiovascular disease in sub-Saharan Africa occurred among people 30 to 69 years of age, which is at least ten years younger than the age range they occurred in most developed countries.²⁰ Tobacco researchers estimated that 25,000 South Africans died per year from tobacco-related illnesses.²¹ In 1996 stroke, IHD, and respiratory disease mortality rates were 316, 250, and 167 per 100,000 among men and 270, 123, and 53 per 100,000 among women.¹² By 1998 IHD comprised about one third of all vascular deaths.²² Furthermore, 22.9% of men and 24.6% of women had hypertension, and 12.6% of men and 16.3% of women had severe hypertension.⁵² A study conducted in 1996 in Mamre, South Africa, a small, predominantly Colored town, found that 32% of women 25-44 years old and 49% of women 45-64 years old were obese (BMI>30). Obesity rates among men were lower at approximately 14%. For both men and women, weight had increased over the past seven years.²³ Other studies confirmed that these trends towards obesity were occurring nationally.²⁴ The trend away from infectious diseases towards degenerative and man-made diseases was consistent with the idea of an epidemiological shift.

Nearly 60,000 new cases of cancer were reported in 1999.²⁵ Cancer was increasing in women and men; 1 in 6 males and 1 in 7 females had a lifetime risk of developing cancer in 1999, up from 1 in 4 males and 1 in 6 females in 1996-1997.²⁵ Lung cancer, which accounted for 6.3% of new cancer cases, was the fifth leading cancer among men and ninth among women.²⁵ Lung cancer increased with age; the age-standardized incidence rate of lung cancer was 28 per 100,000 among 50 to 54 year-old men and 89 per 100,000 among 65 to 69 year-old men.²⁵

Mortality statistics (number of adult deaths and causes of death) in South Africa were underreported, particularly in rural areas, until 1994 when the GNU implemented a series of measures to improve death registration.²⁶ Due to varying clinical criteria for diagnosing chronic conditions, chronic diseases were underreported, and reporting varied by geography and socioeconomic status.⁵

Health Care Access Seventeen percent of the population was insured through a medical scheme, most of which were employer-based.²⁷ Sixty-percent of the population utilized public facilities, 36.3% used private facilities, and 3.6% relied on traditional healers. Sixty-three percent of South African households had a clinic within 2 km: 76.0% of households in urban areas and 42.5% in non-urban areas.²⁸

Health System and Epidemiologic Indicators ³

INDICATOR	YEAR	
Average life expectancy at birth, years (total, female, male)	58, 61, 56	2000
Maternal mortality ratio (per 100,000 live births)	124	2002
Under five mortality rate (per 1,000 live births)	57	1995
Infant mortality rate (per 1,000 live births)	43	1995
Vaccination rates (% of DTP3 coverage)	73	1996

² Any hypertension: BP equal to or above 140/90 mmHg or taking hypertension medication. Moderate and severe hypertension: with BP equal to or above 160/95 mmHg or taking hypertension medication.

³ This data was comprised from the following sources: WHO, UNICEF, UN.

INDICATOR		YEAR
Undernourished (%)	<5	1996
Adult (15-49 years) HIV prevalence (%)	8.4	1996
HIV antiretroviral therapy coverage (%)	21	2006 ⁴
Tuberculosis prevalence (per 100,000)	658	1996
DOTS coverage (%)	0	1996
Malaria cases (per 1,000)	<1	1996
Government expenditure on health as a % of total government expenditure	12.3	1996
Government expenditure on health per capita (international dollar, USD)	223, 101	2000
Total health expenditure per capita (international dollar, USD)	551, 251	2000
Physician density (per 10,000)	6	1996
Nursing and midwifery density (per 10,000)	41	2004
Number of hospital beds (per 10,000)	28	2005

Health System

During apartheid, South Africa had a large, fragmented public health system with vast inequalities in health status, health infrastructure development, and health service access among Whites, Coloreds, Indians, and Black Africans.^{5,29} The public health system was hospital-based, with strong ties to academic medical centers, and it catered to Whites. Primary health care (PHC) was not universally available, particularly among the poor.³⁰ In 1990 there was a surplus of 11,700 beds for Whites and a shortage of 7,000 beds for Blacks.³¹

While there were moves towards a more equal system starting in 1990, the ANC government aimed to rectify the situation by promising universal access to PHC when it took office in 1994. The new constitution stated:

The State must take reasonable legislative and other measures within its available resources to achieve the progressive realization of the right of the people of South Africa to have access to health care services, including reproductive health care.... The state must ensure that everyone has the right to an environment that is not harmful to their health or well-being.... The health sector must play its part in promoting equity by developing a single, unified health system.

Even before the constitution was officially passed, the ANC government began addressing problems of inequity in health as in other sectors.

The 1986 Ottawa International Conference, the first international conference on health promotion, initiated a gradual uptake of health promotion principles throughout South Africa, which in turn guided the new approach to health care in the post-apartheid era. Health promotion, an inter-sectoral, multidisciplinary approach to improving health outcomes, aimed to improve health by changing environmental factors, giving everyone an equally wholesome environment with equal opportunities to access care, rather than focusing only on changing individual behavior.³² Health promotion aimed to

⁴ Some public facilities began offering antiretroviral therapy (ART) in 2004. ART coverage data prior to this time is incomplete.

promote equity in health and enforce the idea of health as a human right through legislation, fiscal measures, taxation, organizational change, community participation, and program evaluation.^{32, 33}

Governance

The Department of Health, working directly under the President, provided leadership on national health concerns and refocused the country's health priorities on immunization, nutrition, reproductive health, HIV/AIDS, TB, tobacco use and advertising, and the availability of pharmaceuticals.¹⁶

The province-wide district health system was rooted in PHC delivery. Nine provincial health departments were created to facilitate implementation.¹⁶ Provinces provided hospital care, PHC, and curative and emergency services.³⁴ Local governments also provided primary care with financial assistance from provincial governments.³⁵ Private hospitals, mining clinics and hospitals, and various independent organizations like the South Africa Red Cross provided health services as well.²¹

Financing

The GNU Reconstruction and Development Program (RDP) proposed universal access to PHC in 1994.² ¹⁶ Health care fees for pregnant women and children under six were eliminated, with hopes of eliminating fees for all primary care services in 1996.³⁴

There were four main sources of financing for the health care system: government, employers, households, and donors or non-governmental organizations (NGOs). In the 1992-1993 fiscal year public sources (such as taxes) comprised 38% of health care financing, while out-of-pocket payments comprised 14%, and medical schemes comprised 40%.³⁶ Expenditures came from spending on private health services (58.2%), public health services (38.6%), public and donor-funded capital projects (1.3%), and research and training (1.8%). Health spending per capita was USD 138.24 in fiscal year 1995-1996.³⁷ In the 1996-1997 fiscal year the government spent 9.9% of its budget on health.²⁷ Seventy-six percent of public health expenditure went to the hospital sector, and 11% went to non-hospital primary health care (see **Exhibit 3** for allocation of 1996-1997 health budget by service category).

Workforce

In 1996 there were 6 physicians per 10,000 people; however, there were only 1.8 physicians per 10,000 people in the public sector, and rates varied by province from as low as 1.1 (public and private generalists and specialists combined) to 12.8 per 10,000. The percentage of doctors working in the private sector had increased substantially, rising from 48% of doctors in 1980 to 57% in 1996. Most physicians chose to work in urban, secondary, and tertiary care centers despite a stated national commitment to PHC. Due to emigration, there was a shortage of physicians. The Northwest was short 120 physicians, for example, and had 60 unfilled medical officer posts.²⁷

Tobacco

The tobacco plant was first domesticated in the Americas around 6000 BCE. When Christopher Columbus and his fellow travelers arrived in the Americas in 1492, they witnessed Native Americans smoking tobacco from a pipe.³⁸ They brought the tobacco plant back to Europe, and resultant knowledge, use, and eventual addiction spread quickly (see **Exhibit 4** for more on nicotine, an additive chemical in tobacco plants).

French Ambassador Jean Nicot promoted tobacco as a treatment for common ailments, and physicians began prescribing it to their patients in the mid-sixteenth century.³⁹ Once commoditized, Europeans mainly consumed tobacco for recreation.⁴⁰ Within 100 years of Columbus' first encounter with tobacco, it was being grown and traded all over the world.³⁸

Commercialization

The United States started exporting tobacco to Europe in the early seventeenth century.³⁸ Given that cultivation was labor intensive, lasting 15 months, large plantations soon began relying on slaves imported from Western and Southern Africa.^{38, 41} Cigarette manufacturing was mechanized in 1880, increasing cigarette production and reducing production costs.^{38, 41} Pack size increased from 10 to 20 cigarettes.⁴² Innovative advertising and intensive promotion, which glamorized cigarettes and encouraged the social acceptability of smoking, stimulated demand for cigarettes over the first half of the twentieth century.

Smoking rates increased dramatically in response to these advancements in production and marketing. In 1880 in the United States (US), Americans consumed 40 cigarettes per capita per year; by 1965 consumption increased to 4,259 cigarettes per capita per year.⁴³ By 1950, 80% of tobacco consumed in the US was in the form of cigarettes, and 50% of men smoked.⁴⁴

Tobacco and Health

Rising lung cancer rates in the 1930s led scientists to investigate the link between smoking and lung cancer. Tobacco companies were aware of the connection as early as the 1950s but worked to create false controversy around the research.³⁸ Thus, while several epidemiological analyses showed a strong correlation between smoking and lung cancer, smoking was not widely accepted as a risk factor for lung cancer until the US Surgeon General issued a landmark report warning of the effects of smoking in 1964. The regulation of cigarette advertising and promotion followed the report, and in the 1970s and 1980s scientists established a further link between secondhand smoke and numerous poor health outcomes.³⁸

Turning to the International Market

As cigarette consumption declined in the US and other high-income countries in response to tighter tobacco control regulations and increased public knowledge about the health effects of smoking, tobacco companies turned to less-regulated foreign markets to recruit new smokers. Trade liberalization in the 1980s and 1990s allowed multinational tobacco companies to establish more control over cigarette manufacturing in developing countries,⁴⁵ permitting them to take over state manufacturing companies and introduce higher quality, cheaper, international cigarette brands with elaborate marketing campaigns.⁴⁶⁻⁴⁸ Tobacco companies substantially increased cigarette advertising that promoted Western ideals around smoking to stimulate demand for foreign cigarettes. In 1994 Philip Morris, Japan Tobacco, and British American Tobacco, the world's three largest multinational cigarette companies, had combined tobacco revenues of more than USD 88 billion.⁴⁹ Manufactured cigarettes made up 60% to 80% of tobacco consumed.^{5 50, 49}

Epidemiology and Health

In 1995, 1.1 billion people smoked worldwide; 13,000 to 14,000 young people were becoming long-term smokers per day in high-income countries and 68,000 to 84,000 per day in low- and middle-income countries.⁴⁹ Eighty-percent of all smokers resided in developing countries, and 70% were men.^{49, 51} There

⁵ Bidis (thin, hand-rolled, filter-less cigarettes wrapped in nonporous leaves) and roll-your-own accounted for 5%, and the remaining 15% to 35% were other tobacco products.

were an estimated 4 million tobacco-related deaths, half of which occurred in developing countries, a fourfold increase from 1955 when 500,000 tobacco deaths occurred in developing countries.⁵¹

Smoking tobacco was responsible for more disease and more diverse types of disease than any other form of tobacco use.⁴¹ Half of all smokers died from their tobacco use, and half of all deaths occurred between the ages of 35 and 69. The gases from cigarette smoke damaged the lungs; carbon monoxide reduced the blood's ability to carry oxygen; and tar, which collected in the lungs, contained a vast array of carcinogenic compounds.⁴¹ Smoking caused irreversible damage including ischemic heart disease, emphysema, lung cancer, and many other cancers with high mortality rates.⁵² TB infection, incidence, and severity also were related to tobacco use.⁴¹ Nearly 61% of TB deaths were attributable in part to smoking.⁵³

Passive, side stream, and secondhand smoke (see **Appendix Definitions** for definitions of these terms) had health implications for nonsmokers.⁴¹ Children of smokers were more likely to have bronchitis, pneumonia, asthma, chronic cough, ear infections, and slower rates of lung development and were at increased risk of sudden infant death syndrome (SIDS).⁵⁴ A pregnant woman who smoked was more likely to lose her fetus through spontaneous abortion, and babies born to mothers who smoked weighed on average 200 grams less than babies of nonsmokers.⁴² In the US secondhand smoke caused an estimated 38,000 deaths per year in addition to more than 1 million illnesses in children.⁵⁵

Global Tobacco Control

Not long after being recognized as a significant disease risk factor, tobacco took its place on the global health agenda, albeit in a limited fashion. The First World Conference on Tobacco or Health in 1967 fostered international collaboration around tobacco control.⁵⁶ In 1971 the World Health Organization (WHO) began advocating for legislative action on tobacco control⁴⁹ and in 1988 established World No Tobacco Day.⁵⁰ Rapidly rising rates of global tobacco use led to a proposal for a Framework Convention on Tobacco Control (FCTC) in 1995, which proposed global regulatory standards and created a platform for further inter-sectoral and inter-governmental collaboration.⁴²

Early pioneering tobacco control efforts in Canada, Finland, Norway, Singapore, and the US informed global tobacco control efforts.⁵⁷ Tobacco control legislative efforts had several goals: to establish government policy around tobacco control; to encourage cessation and reduce smoking initiation; to protect the rights of nonsmokers; to reduce harmful substances in cigarettes; and to allocate funding for tobacco control programming.⁵⁰ When introduced together, national and local legislation, information and education, and economic incentives increased the effectiveness of tobacco control efforts. National ministries of health oversaw tobacco control in most countries, coordinating the response of other ministries and NGOs.

Tobacco Control Strategies

Regular and sustained tax increases were long found to be a very effective and inexpensive policy tool for reducing cigarette consumption.^{58, 59} Higher tobacco prices resulted in lower consumption among all age groups, but the most significant drops were among young people and people with lower socioeconomic status who were more sensitive to price increases.⁵⁰ In Canada increases in cigarette taxes in the 1980s and 1990s led to decreases in smoking prevalence, but reports of increased smuggling led the government to reduce taxes again in 1994; smoking rates among youth increased, and gains that had been made in the general population plateaued.

Regulations prohibiting advertising, promotional distribution, vending machine sales, smoking in public places, and under-age smoking complemented taxes in reducing consumption. Advertising restrictions decreased smoking rates by preventing tobacco companies from targeting vulnerable sub-

segments of the population for initiation. In Singapore, for example, the Ministry of Health created the National Smoking Control Program in 1986 prohibiting tobacco product advertising, smokeless tobacco advertising, paraphernalia bearing cigarette brands, cigarette vending machines, and tobacco sports sponsorship.⁶⁰ The World Bank reported that complete advertising bans reduced consumption by 7% to 9% on average when fully implemented.⁴⁵

Clean indoor air laws protected nonsmokers from exposure to second-hand smoke and encouraged smokers to quit. In the United States early efforts to promote clean indoor air were accomplished at the city and county level. The US government initially restricted smoking on airplane flights, interstate buses, and federal buildings in the 1980s, and shortly thereafter, some states began passing legislation restricting smoking in all public places. States used revenue from cigarette taxes, philanthropic organizations, and the federal government to increase funding for state-wide comprehensive tobacco control programs that encompassed a full array of tobacco control measures.⁶¹ Fully funded, comprehensive tobacco control programs in the 1990s led to a 1% per year decline in smoking prevalence in certain states in the US.⁶²

Health warnings educated consumers about the hazards of smoking and tar, and nicotine content labeling on cigarette packages provided smokers with knowledge about cigarette content.⁶³ In Canada anti-tobacco activists advocated for black and white, text-based warnings covering 25% of the principal display areas. The government passed the proposed legislation in 1994, making the country's warnings the largest in the world.^{64,50} The tobacco industry had been hiding warnings within colorful packaging prior to the legislation.

Nicotine replacement therapies (NRT) and bupropion (see **Appendix Definitions** for an explanation of these terms), pharmacological products that aided cessation, doubled the success rate of other counseling-based interventions and reduced smoking rates. Almost any smoker could use them safely. NRT was more readily available in high-income countries than in low- and middle-income countries, where the drugs were more expensive, heavily regulated, and less utilized.⁶⁵

Tobacco and South Africa

Tobacco cultivation began in the 1700s in South Africa, and the first tobacco factory opened in 1882.⁶⁶ Afrikaner Anton Rupert founded Rembrandt Tobacco Manufacturing Company as Voorbrand, a small tobacco shop, in 1942 in Johannesburg.⁶⁷ By the end of World War II, Rupert began mass-producing cigarettes and changed the name of the company to Rembrandt.⁶⁸ Rupert became a powerful and politically influential businessman with established links to the ruling National Party.⁶⁹ Economic sanctions and limited involvement of multinational tobacco companies during apartheid gave Rupert a dominant share of the South African market.⁶⁷ By the mid 1960s, Rupert's company manufactured 1 out of every 50 cigarettes smoked in the world.⁷⁰

The Tobacco Institute of South Africa was formed in 1991 to represent the non-commercial, common interests of tobacco product manufacturers and growers.⁷⁰ The group aimed to protect the interests and the rights of the tobacco industry in South Africa through lobbying, funding research for the development of the industry, and combating smuggling.^{68, 71}

Rembrandt held 87% of the market share in South Africa when it merged into Rothman's International in 1995, taking control of 95% of the market (see **Exhibit 5** for tobacco company market shares in South Africa).⁷¹ With cigarette sales in 160 countries, Rothman's International was the largest tobacco company in South Africa and the fourth largest tobacco company in the world.⁷² Of note, Rupert's companies provided equal wages to all, regardless of race, and provided some of the highest wages for Black Africans in the country.⁷³

Epidemiology of Smoking in South Africa

Since 1976, smoking rates in South Africa had remained high among all ethnic groups, though they varied by race and gender (see **Exhibit 6** for charts of smoking prevalence by race).^{69, 74} In 1988 smoking resulted in an estimated 110,856 years of life lost among 35-64 year-olds.⁴⁹ Smoking-related diseases accounted for 33.7% of White, 25.8% of Asian, 16.6% of Colored, and 5.4% of African deaths. Years of life lost due to smoking decreased among White and Asian men but increased among other groups.⁷⁵ Between 1970 and 1990, cigarette consumption increased by 139%, predominately among Black Africans, as it decreased among Whites.⁷⁴ The total estimated smoking-attributable costs more than tripled, from 0.03% of South Africa's GDP to 0.10% of GDP, between 1980 and 1985.⁷⁰ By 1994 it was estimated that tobacco cost USD 694 million in lost productivity and USD 390 million in health care costs.⁴⁹

In 1993, 33% of South Africa's population aged 18 years and over — approximately 7.6 million people — smoked.⁷⁴ In 1995 lung cancer was the fourth leading cancer among White women, fifth among Black African women, second among Colored women, and fifth among Indian women.⁷³ A study of smoking among pregnant women in Johannesburg, Cape Town, and Port Elizabeth showed that 21% of the pregnant women in the study smoked, and 50% of pregnant women in the study were exposed to passive smoke.⁷⁶

The leading causes of death from smoking in South Africa were chronic obstructive pulmonary disease, TB, lung cancer, and IHD. This mortality pattern was different from that in high-income countries where cardiovascular diseases and lung cancer were the main causes of death from smoking.⁷⁷ In South Africa an estimated 60% of lung cancers were attributable to smoking, and 20% of deaths caused by TB could have been averted if the TB patients had not been smokers.²² It also was estimated that 8% of adult deaths in South Africa were attributable to smoking, approximately 21,500 deaths per year.²² This number was expected to rise to 66,000 in the next four years⁷⁸ and to 250,000 over the next 40 years if new interventions were not implemented.⁷¹

Surveillance

During the 1970s, there was little data on tobacco control, and independent polling agencies were the ones collecting it. The Center for Epidemiological Research, established in 1986, was one of the first research centers to view tobacco as a priority.⁶⁵ That same year, the Medical Research Council (MRC) of South Africa (a governmental organization established in 1969 to conduct health research), the Department of Health, the Cancer Association of South Africa, the National Health Laboratory Services, and the University of Witwatersrand became co-operative members of a new National Cancer Registry.⁷⁵

The National Cancer Registry monitored the burden of pathology-confirmed cancer in South Africa, reporting from all public and private laboratories nationally. The registry was limited because cancer (of which tobacco was a major cause) was underreported due to lack of tissue diagnoses and because collecting and analyzing data required staff and technological support.

In 1996 the Economics of Tobacco Control Project (ETC), a partnership between the University of Cape Town and MRC, was formed. The partners conducted research that highlighted important economic repercussions of tobacco use, such as the economic costs to the health system, and they provided evidence to report on the effect of tax increases on cigarette consumption.

Early Tobacco Control

Tobacco control in South Africa emerged in the early 1970s when smoking was banned in cinemas⁷⁹ and the Minister of Finance imposed a small sales tax on cigarettes. Derek Yach was a medical student who had become interested in tobacco research and advocacy after noticing the high prevalence of smoking and

tobacco products being sold on the medical campus. Yach initiated anti-tobacco advocacy on campus. He explained, “I saw [tobacco] also as a political issue. One has to remember that in South Africa the main tobacco company, Rembrandt, was founded in 1948, which was the year the national government came into power and brought in apartheid. And it was the same Afrikaans government that supported Afrikaans business, which was where the tobacco company was.”⁷³

In 1975 the tobacco industry voluntarily agreed not to advertise cigarettes on TV. The industry did advertise cigarettes on the radio and indirectly at sporting and cultural events. The country’s major newspapers and magazines carried tobacco advertising; very few included health articles on smoking, and anti-tobacco advertising was prohibited on TV.⁸⁰ In 1980 the government banned smoking on domestic flights.⁵⁷

By 1982 Yach was working at the MRC. With help from various colleagues, he published one of the first tobacco control articles in the widely respected *South African Medical Journal*, focusing on the economic aspects of smoking. The following year Parliament Member Alf Widman introduced a Smoking Control Bill. The tobacco industry, using its ties to the apartheid government, lobbied furiously against the bill, and it was not passed.⁶⁸ A majority of the South African Government claimed it preferred to work with the existing, informal agreements it had with the tobacco industry instead of introducing legislation.

In 1983 and 1986 the Minister of Finance refused to increase the excise tax on cigarettes, which was less than 30% of the retail price, due to pressure from the tobacco industry (see **Exhibit 7** for comparison of tobacco tax in select countries in 1990).⁶⁸ Between 1970 and 1990, the real excise tax rates had fallen 82% and there had been a 32% decline in retail prices; consumption increased during this same period by 139%.⁶⁸ The tobacco industry continued influencing the cigarette tax but voluntarily agreed to start printing warning labels in English and Afrikaans on cigarette packs in 1991.

Data, Advocacy, and Legislation

Over time the MRC collected data that allowed it to publish information on children and tobacco use, passive smoking, and the tobacco industry’s undue political and social influence.⁶⁸ In 1988 the *South African Medical Journal* devoted an entire issue to tobacco. This seminal journal issue claimed that the “costs of the tobacco industry to society outweighed its benefits.” The journal highlighted the economic costs of smoking and advocated for stronger tobacco control policies.⁶⁸

When local tobacco control legislation was first proposed in 1989, administrative officials and the restaurant association, in coordination with the tobacco industry, came together to oppose it.⁸¹ Restaurateurs created a pro-tobacco, special interest group to lobby against the legislation, and Anton Rupert threatened to withdraw his funding to the AIDS Foundation and the Cape Town City Orchestra if the legislation passed.⁶⁸

During the new minister of health’s first budget debate in 1991, Parliament Member Carole Charlewood referred to the *South African Medical Journal* issue on tobacco; he accused the government of “protecting the vested interests of the powerful tobacco industry and not the people of the country.” Rina Venter, South Africa’s first female minister of health, did not have a background in tobacco control, but she understood the influence the tobacco industry had on the government. She found it hard to counter Charlewood’s claim and said she “regarded the matter as sufficiently important to make the decision there and then without having first consulted with her cabinet colleagues.”⁶⁸ Venter initiated a statewide anti-smoking campaign, and in 1991 she introduced the Tobacco Products Control Bill. She was faced with the challenge of convincing the rest of her party of the importance of tobacco control. President FW de Klerk, when asked to participate in World No Tobacco Day, replied that his schedule was too stressful for him to go without smoking.⁶⁸

At the time, some of the leading volunteer anti-tobacco agencies in the country came together to form the Tobacco Action Group, which included the National Council Against Smoking, the National Cancer Association, and the Health Foundation of South Africa. Venter agreed to push the legislation nationally from the inside if advocacy groups such as the Tobacco Action Group would push from the outside, create favorable media coverage, and work on public opinion.⁶⁸

Anti-tobacco advocates saw tobacco as an issue that addressed health and much more. Priscilla Reddy, a health promotion specialist who joined the MRC in 1992, said:

Looking at life from a health promotion paradigm and what was happening in the country in 1992, just the end of apartheid, it didn't make sense to focus on a single disease or a single issue because everything was so interrelated. One side of me was interested in issues that led to infectious diseases such as HIV, but then there was another side that was interested in looking at science from a more global perspective, a health promotion perspective, and that's how I got involved in tobacco as a determinant of disease. ... I felt if you can change the determinants, you could change the long-term consequence of disease. That's how I got into tobacco.

For me, it was the tobacco industry, Anton Rupert, the apartheid giants all working together with just another poison attacking the people. Apartheid was one poison; tobacco was another poison, but all the growers were the same. Personally, I approached tobacco...from an activist perspective.... I saw it as just another way of fighting for freedom.

Yach explained further, "We were trying to highlight discrepancies and inequalities and issues which a future government would have to address. The cadre of epidemiologists and public health people was a small, well-knit group who all continued to have a vision that political change would come to the country."

Engaging the ANC

As apartheid came to an end, Black Africans who had been exiled during apartheid started returning to South Africa. Zuma, a pediatrician living in the United Kingdom (UK) and an executive member of the ANC, returned to South Africa and received an appointment at the MRC to work on women's health issues. Born in Natal in 1949, Zuma had gone into exile during the late 1970s. She completed her medical education and worked in Swaziland, Zambia, and the UK before returning to South Africa in 1990. Like many other exiles, she returned to assist in the transition to a democratic South Africa. In Swaziland Zuma served as pediatric medical officer at a government hospital, and while working for the ANC health department in Zambia, she began working with fellow ANC members to craft post-apartheid health policies. During her time at the MRC, Zuma noted the high rates of smoking among women in South Africa.

Reddy worked with Zuma at the MRC on incorporating tobacco control into the ANC's health policies, using the idea of health promotion as a guide. The health promotion matrix provided a framework to create a multipronged approach to health issues and set the public health agenda (see **Exhibit 8** for how tobacco fit into the framework).

Zuma brought the data on high smoking rates to the attention of the ANC, which added tobacco control to its health priorities. ANC leaders also began speaking publicly about tobacco control and the party's intentions to address tobacco use once in power. Nelson Mandela issued a statement supporting tobacco control at World No Tobacco Day, May 31, 1992.

The tobacco industry continued to stand its ground and chose not to respond to a public statement about tobacco use being the largest preventable cause of death. Instead, the industry released a pamphlet called "Common Sense in Smoking—Personal Choice and Moderation the Key." It asserted that allegations against smoking were based on heated reactions rather than facts. The industry called for private talks with

Venter in which it “spent an entire afternoon... giving an elucidation of research, which in their opinion, as they interpreted it, indicated that tobacco smoke was not at all harmful,” Venter said.⁶⁸

International Movement

Yach and his colleagues began planning the All Africa Conference in Harare, Zimbabwe to highlight the emerging tobacco epidemic in Africa. One hundred ten delegates from 16 African nations and seven other countries attended the conference in 1993. Among the attendees were representatives of the tobacco industry, representatives of tobacco growers, as well as government and health officials. Zuma openly declared her party’s commitment to tobacco control during her opening speech at the conference. Additionally, Ruth Roemer, a tobacco control advocate, spoke publicly for the first time about the nascent Framework Convention on Tobacco Control under discussion at WHO.⁶⁸

The tobacco industry anticipated the conference in Harare and tried to counteract it. In one public media campaign, the tobacco industry called the conference a threat to the country and a cause of “extreme alarm.” The industry issued statements stating that Dr. Stamps, Zimbabwe’s minister of health, was connected to the tobacco industry. Tobacco industry documents later showed that the tobacco industry had invested a large sum of money in preparing and briefing the media for the meeting and had carefully planned speeches for the tobacco growers.⁶⁹

National Legislation

There was opposition to Venter’s Tobacco Products Control Bill both within and outside the South African Government until 1993. The tobacco industry was opposed to the restrictions on the premise that they would impact cigarette sales and impact smokers’ rights. The South African Business Institute and the South African Broadcasting Corporation, a powerful media institution with strong ties to the tobacco industry, were against the bill because of the potential for revenue loss.⁶⁸ Several NP ministers, including the Minister of Agriculture, did not support the bill, and it faced strong opposition in Parliament.⁷³

Despite the opposition, Parliament approved the Tobacco Control Bill in 1993, bringing Venter “the most satisfaction of any legislation” since she had become minister. It contained partial restrictions on tobacco advertising, increased health warnings about tobacco, and instituted regulations around sales to minors. Venter made it clear that her business was health and not “problems regarding the cultivation of tobacco.”⁶⁸ The smoking data collected mainly via the MRC over the past 10 years helped convince Parliament to pass the bill, but it had been revised to exempt radio stations from broadcasting health warnings. Additionally, the bill did not call for a total ban on smoking in public places, and it lacked a mechanism for enforcement.⁶⁹

With only a partial ban on advertising, the industry advertised cigarettes by sponsoring athletic and cultural events and took advantage of the radio.⁸² The tobacco industry was targeting children, the illiterate, and the poorest communities, as well as Black Africans. Counter-advertising was not widely available because magazines, in fear of losing revenue from tobacco advertising, were not printing anti-tobacco messages that discussed the harmful effects of smoking. Even after the Tobacco Control Bill of 1993, 89% of minors who attempted to purchase cigarettes were sold cigarettes.⁸³ In addition to intense lobbying against tax increases, the industry raised its prices to lead the public to believe cigarette taxes alone increased costs.⁸⁴

Studies showed that there was public support for tobacco regulation; 75% of respondents were in favor of banning television, radio, newspaper, billboard, and cinema advertising and in favor of prohibiting sales to children under 16. Sixty percent were in favor of a tax increase on cigarettes.⁸³

Tobacco Control under the ANC

In 1994 under President Mandela, the governmental alliances with the tobacco industry were broken. The ANC was focused on restructuring the health system with a focus on primary care and prevention, including tobacco control. Mandela had, in fact, called for a “world free of tobacco.” He appointed Zuma minister of health to help craft the ANC health policies under the RDP. Alcohol and tobacco, which were considered issues of health promotion, were among the top priorities (see **Exhibits 9a** and **9b** for health system goals and health promotion objectives).³³

With support from President Mandela, local tobacco experts, and anti-tobacco advocates, Zuma subsumed the tobacco control movement quickly. “Zuma was a medical doctor, but she was an ANC freedom fighter, and prevention was the bedrock of the ANC health mandate,” Reddy explained.⁸⁰ “It shouldn’t be seen that tobacco replaced the other stuff. Other things were promoted as well in parallel. The advantage was that the country was not currently reviewing legislation on tobacco, so it was easy to get it on the agenda.”

Tobacco control was housed in the National Directorate of Health Promotion, which had 11 staff members and two sub-directorates.³³ The MRC provided evidence to the National Directorate of Health Promotion and worked very closely with the director. “We started playing a major role because now you started needing evidence,” Reddy explained in talking about her role at the MRC. She went on, saying:

And in many ways we were doing this out of emotion. We knew it [tobacco] was bad, and we had some data, but what we didn’t have was a whole machinery, a communication machinery, a whole institute. The tobacco industry responded very quickly, and they set up a whole institute ... and they had lawyers. They had money, we didn’t have money, but we knew we had to legislate because we were coming from this health promotion paradigm, and you had to create an enabling environment, and the only way you could create an enabling environment was to have a law to prohibit x, y, and z from happening.

The health promotion matrix (see **Exhibit 8** for an example) guided the translation of research into legislation.⁸⁵ Reddy explained, “If you look at health from a health promotion and public health perspective, tobacco will automatically be up on the top. Tobacco is unsurpassed.”

Taking Action

In 1994 the government created a Tobacco Control Advisory Committee in the Department of Health to develop an inter-sectoral approach to tobacco control.⁸⁶ Zuma published draft regulations for mandatory explicit warnings on printed advertisements, TV commercials, and cigarette packages and solicited feedback. The tobacco industry responded by stating “the warnings were unconstitutional because they deprived manufacturers of constitutionally protected property rights of registered trademarks” and that “they violated the companies’ rights to freedom of expression.”⁶⁸ Much of the media was highly opposed as well, predicting a “bloodbath” and the loss of millions in revenue. The MRC countered the claims by showing that in the 10 most popular magazines, tobacco advertisements accounted for less than 10% of all advertisements. Later that year, the regulations were passed and enacted after giving tobacco companies time to use up their existing inventory of packaging materials. The pace at which the change occurred caught some off guard and led to accusations that Zuma was “bulldozing” health bills through Parliament.⁶⁸

Under pressure from anti-tobacco lobbyist groups, ANC health advisors proposed a 100% increase in cigarette taxes just before the 1994 budget passed. The Minister of Finance eventually decided on a 25% tax increase, stating that the additional increases would be phased in over time until they reached 50% of the retail price of cigarettes.

When Yach visited the head of customs and excise in the Ministry of Finance in order to find out who made the decision on the tax price, the head of customs described the process to Yach: “The way it happens is we do all these calculations and then we throw them all away, and the night before the budget, we get a note saying ‘the tobacco industry is willing to tolerate the following level.’ The head of customs was focused on raising revenue; and if someone could demonstrate that increasing cigarette taxes raised revenue, he would be open to the idea.”⁸²

The Economics of Tobacco Control Project estimated a price elasticity of demand for South Africa of -.59 in the short run and -.69 in the long run (see **Appendix Definitions** for more on price elasticity).⁸⁷ It was estimated that the tax increase would result in 400,000 fewer smokers and lead to an additional USD 174 million in government revenue. The tobacco industry challenged the increase, claiming that it would increase smuggling and impact the economy due to job losses among tobacco farmers. The tobacco industry told the government, “You will lose jobs.” The government responded by saying it would use revenue to employ more customs and excise officials and tighten border controls.⁶⁸

The government funded quit lines (see **Appendix Definitions** for more on quit lines) in 1995 and required health warnings on tobacco advertisements.⁸² By 1995 the Tobacco Action Group, MRC, the Medical Association, and the Progressive Primary Health Care Network were responsible for most of the tobacco control messages in the media.⁶⁹ Nelson Mandela had received two no-smoking medals, one from WHO and another from the Commonwealth Games Council.

When in 1996 Zuma accused tobacco companies of ignoring laws requiring the display of health warnings on cigarette packs and threatened to ban tobacco advertising altogether, Rupert took out a full page, open letter to Zuma in the Sunday newspapers. He said that the absence of warnings on certain brands could be blamed on cheaper, smuggled goods which had entered South Africa illegally due to the tax increases. Zuma vowed to intensify her campaign and stated, “Responding to individuals is not really our priority at this stage. We are more concerned with the health of the nation.”⁶⁸ In 1996 smoking prevalence had declined to 30% from 33% in 1993, still leaving it at one of the highest levels in the developing world.

Next Steps

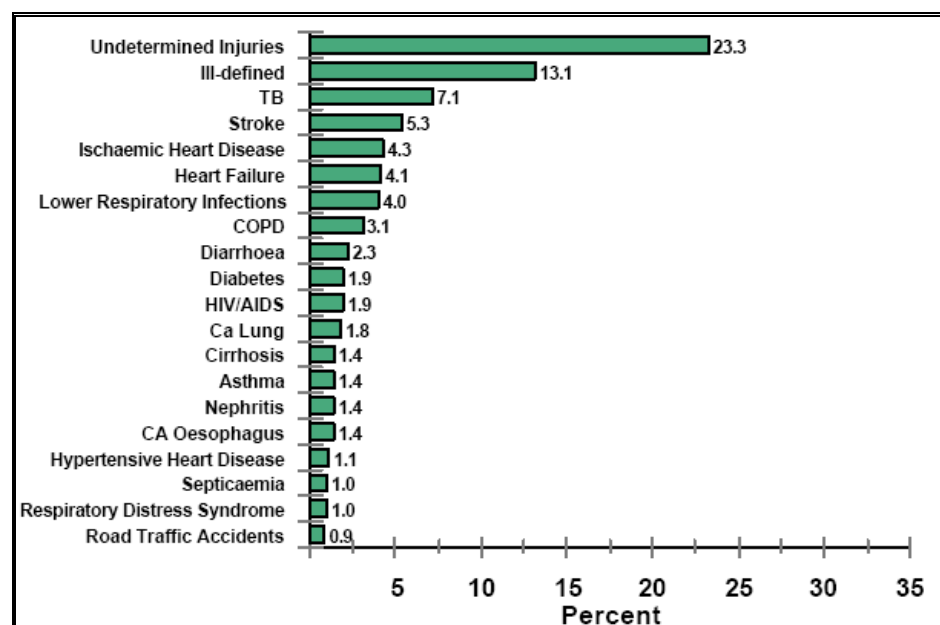
The country was preparing for the full enactment of the new constitution towards the end of 1996. Zuma presented her thoughts on the restructuring of the health sector:

We intend to decentralize management of health services, with emphasis on the district health system – increase access to services by making primary health care available to all our citizens; ensure the availability of safe, good quality essential drugs in health facilities; and rationalize health financing through budget reprioritization. Furthermore, the development of a National Health Information System will facilitate health planning and management, and strengthen disease prevention and health promotion in areas such as HIV/AIDS, STDs and maternal, child and women's health. The Integrated Nutrition Programme will focus more on sustainable food security for the needy.¹⁶

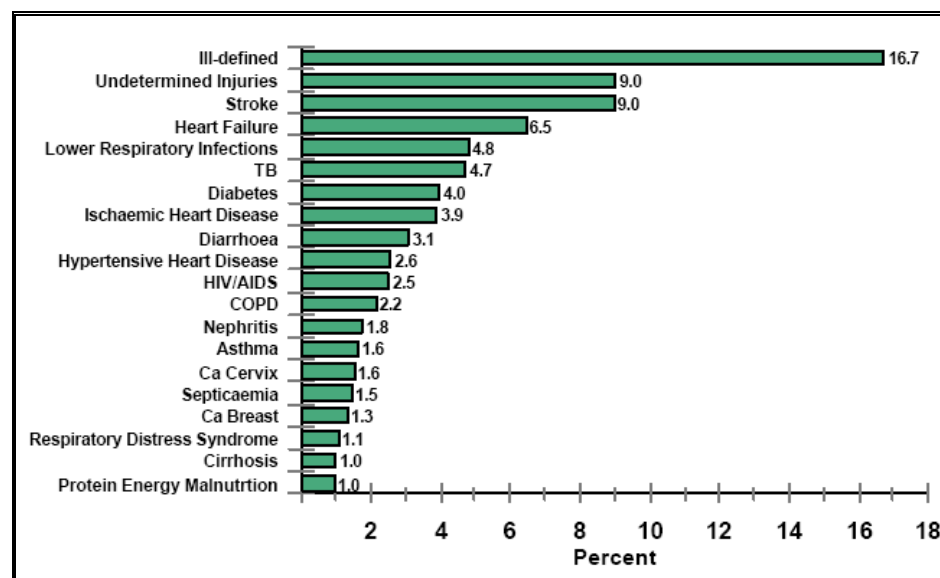
She had lofty goals across the board. Zuma was not sure what her next moves for tobacco control would be. She now had the constitution backing her up in her goal of health promotion, and she had made big promises, but she continued to worry about how to deal with a powerful tobacco industry and its pro-tobacco business and media supporters. Should she focus on taxes? On advertising? On banning smoking in public places? What would make the greatest difference in prevalence in the least amount of time and create the least amount of public backlash? Could she move forward with tobacco control, or should she switch her focus to other areas of health promotion and primary care?

Exhibit 1 *Map of South Africa*

Source: CIA World Fact Book 1999. <http://www.umsl.edu/services/govdocs/wofact99/273.htm>.

Exhibit 2a *Top Causes of Death for Males in South Africa, 1996*

Source: South African Medical Research Council, 2002. Cause of Death Profile, 1996. D. Bradshaw, M. Schneider, R. Laubscher, and B. Nojilana.

Exhibit 2b *Top Causes of Death for Females in South Africa, 1996*

Source: South African Medical Research Council, 2002. Cause of Death Profile, 1996. D. Bradshaw, M. Schneider, R. Laubscher, and B. Nojilana.

Exhibit 3 *Allocation of 1996-1997 Health Budget by Service Category in South African Rands*

Service category	Current	Capital	Total	% of Total
Nurse training	165 047	5 412	170 459	1.06
Academic hospitals	4 240 098	197 85	4 437 883	27.52
Regional hospitals	1 856 481	113 532	1 970 013	12.22
Community hospitals	3 403 445	194 637	3 598 082	22.32
PHC (Personal)	2 261 503	167 056	2 428 559	15.06
PHC (Non-personal)	586 847	12 897	599 744	3.72
Psychiatric hospitals	575 184	23 233	598 417	3.71
TB hospitals	403 318	14 378	417 696	2.59
Emergency services	422 149	53 540	475 689	2.95
Administration	1 221 795	205 527	1 427 322	8.85
TOTAL ¹	15 135 867	987 997	16 123 864	100.00

Source: National Assembly Portfolio Committee on Health. Report on the 1996-1997 Health Budget Vote. Cape Town, 1996.

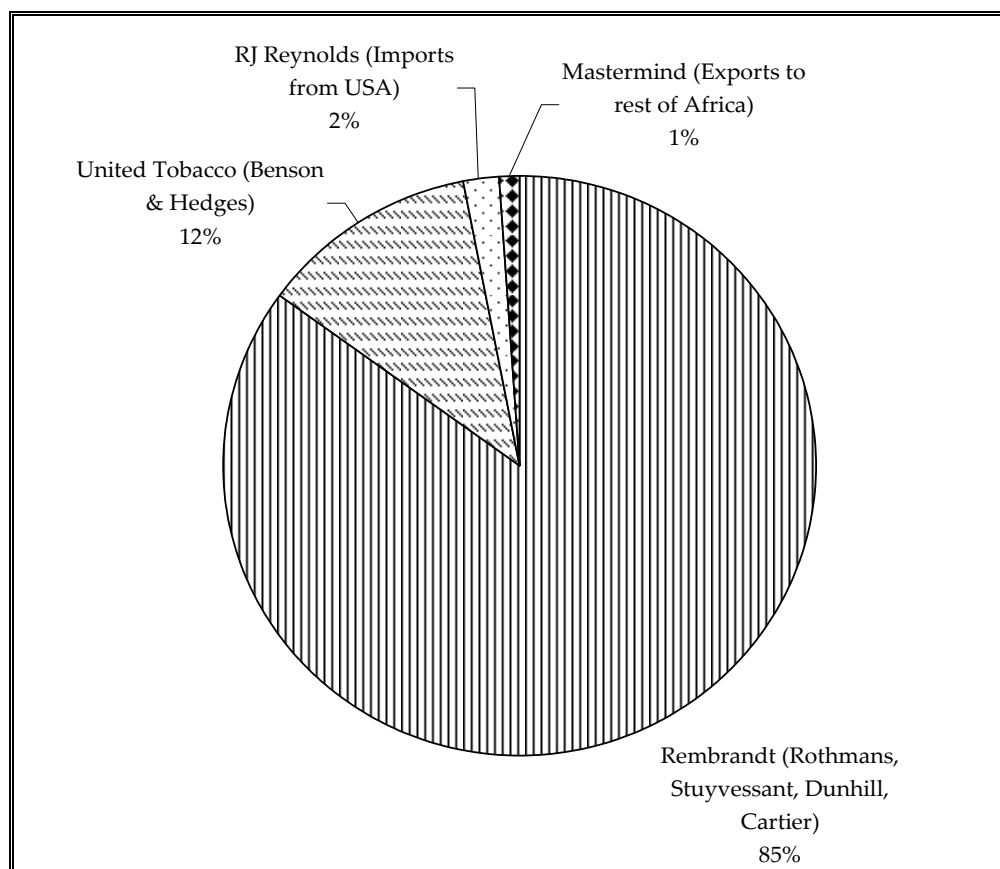
Exhibit 4 *Nicotine*

Nicotine is a psychoactive drug that establishes and sustains dependence on tobacco use.⁶¹ German chemists Posselt and Reimann isolated nicotine from the tobacco plant in 1828. As early as the 1950s, animal studies showed nicotine's addictive effect, and epidemiological studies of quit patterns showed evidence of addiction.⁸⁸ A clear, natural substance that turns brown when burned, nicotine binds to a variety of nicotinic acetylcholinergic receptors in the brain and causes the release of neurotransmitters in the shell of the nucleus accumbens region of the brain. These powerful neurotransmitters, such as dopamine, norepinephrine, acetylcholine, and serotonin, are involved in the reward-response feedback pathways common to other addictive drugs (e.g., cocaine and opiates).^{41, 50} The main motivation behind tobacco consumption is to obtain nicotine, and cigarette use provides a rapid peak in arterial nicotine levels.⁸⁹ The lungs absorb nicotine, which reaches peak concentrations in the brain within seconds by way of the carotid and vertebral arteries.⁹⁰ Oral chewing tobacco provides less efficient, though still potent, nicotine delivery systems because nicotine is absorbed in the mouth.⁸⁹ Continued exposure of nicotine causes changes in the nicotinic receptors such that increased amounts of nicotine are needed to deliver the same neuro-chemical effects.⁹⁰

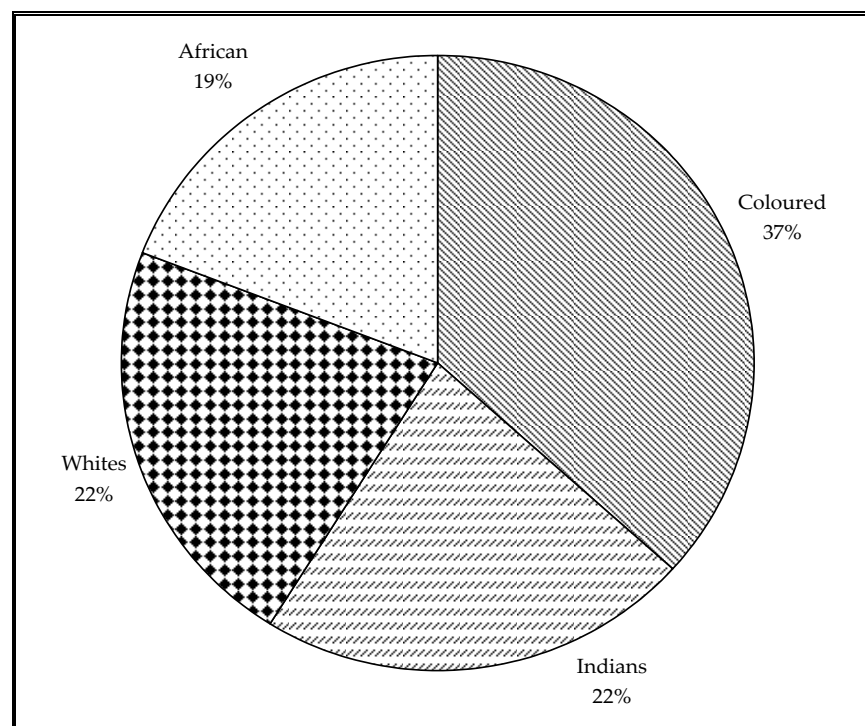
Genetics have been shown to play a role in the onset of smoking, how much a person smokes, and smoking persistence. Genetics play a somewhat less important role in determining women's smoking habits than men's.⁹⁰⁻⁹³ Nicotine addiction is more common among people with mental illness and substance abuse disorders, which researchers attribute to a shared genetic susceptibility to addiction and mental illness and to nicotine's ability to relieve some psychiatric symptoms.⁴⁰

Smokers pattern the frequency of their puffs, the length of time they hold the smoke in their lungs, and the depth of their inhalation in order to control nicotine levels. Evidence exists that smokers who switched to 'light' and 'low tar' cigarettes to minimize their health risks compensate for the switch by altering their smoking patterns. Smokers inhale 'light' and 'low tar' cigarettes more deeply, hold the smoke in their lungs longer, and often unknowingly cover the holes in the filter, preventing air from coming in and diluting the inhaled smoke.⁴¹

Source: Compiled by case writers.

Exhibit 5 *Tobacco Companies in South Africa (% of Market), 1996*

Source: Abedian, Iraj, Rowena van der Merwe, Nick Wilkins and Prabhat Jha, eds. *The Economics of Tobacco Control. Towards an Optimal Policy Mix*, Applied Fiscal Research Centre, University of Cape Town. 1998, p. 252.

Exhibit 6 *Prevalence of Smoking in South Africa by Race (%), 1995*

Source: Abedian, Iraj, Rowena van der Merwe, Nick Wilkins and Prabhat Jha. eds. *The Economics of Tobacco Control. Towards an Optimal Policy Mix*, Applied Fiscal Research Centre, University of Cape Town. 1998, p. 254.

Exhibit 7 *Tobacco Tax as a Percentage of Total Central Government Tax Revenue in Select Countries, 1990*

Country	Total Government Tax Revenue (%)
Zaire	26.3
Tanzania	16.3
Malawi	16.7
Kenya	9.3
Nigeria	7.6
Tunisia	6.3
Egypt	5.7
Zimbabwe	4.6
Ethiopia	4.3
South Africa	1.7
Algeria	0.2

Source: Chapman S, Wai Leng W. *Tobacco Control in the Third World: A Resource Atlas*. Penang: International Organization of Consumers Unions, 1990.

Exhibit 8 *Tobacco Control as Health Promotion*

Health Promotion Strategies	LEVELS OF HEALTH PROMOTION IMPACT		
	Primary Prevention	Early Detection	Patient Care
Health Education and Information	<ul style="list-style-type: none"> ◆ Training to improve knowledge about the adverse effects of tobacco use and the development of refusal skills ◆ Mass communication program 	<ul style="list-style-type: none"> ◆ Identifying smokers and promoting the development and uptake of smoking cessation programs 	<ul style="list-style-type: none"> ◆ Education for recognition of being a passive smoker ◆ Education and skills to cope with: <ul style="list-style-type: none"> ○ Cardiovascular disease ○ Respiratory disease ○ Cancer
Provisions and Facilities	<ul style="list-style-type: none"> ◆ Provision of smoke-free environment for the general public 	<ul style="list-style-type: none"> ◆ Access to: <ul style="list-style-type: none"> ○ Patch ○ Nicorette ○ Alternative Healing 	<ul style="list-style-type: none"> ◆ Provision of support, primary treatment, and rehabilitation facilities
Legislation: International, Regional, National, and Local	<i>International</i> <ul style="list-style-type: none"> ◆ Consensus on trade agreements for developed and developing countries <i>Regional</i> <ul style="list-style-type: none"> ◆ Legislation to support consensus on trade agreements to promote health in neighboring countries <i>National</i> <ul style="list-style-type: none"> ◆ Legislation to protect public health such as banning tobacco advertising, promotion, and sponsorship ◆ Legislation on smoking in public places and work sites ◆ Special legislation to protect children <i>Local</i> <ul style="list-style-type: none"> ◆ Local legislation to ensure enforcement agencies 	<ul style="list-style-type: none"> ◆ Regulation for mandatory screening of general public ◆ Regulation for counseling towards smoking cessation 	<ul style="list-style-type: none"> ◆ Medical care and psycho-social support
Economic Interventions: Taxation and Pricing	<ul style="list-style-type: none"> ◆ Proportion of cigarette taxes increased annually ◆ Annual price of cigarettes increased above inflation 	<ul style="list-style-type: none"> ◆ Use tobacco tax to reimburse the public health sector for screening programs 	<ul style="list-style-type: none"> ◆ Use tobacco tax to reimburse the public health sector for primary care and rehabilitation

Source: Reddy, SP and Swart D. Unraveling Health Promotion: A Framework for Action: Tobacco Control. MRC: 1998.

Exhibit 9a *Goals of the Health System in South Africa*

- (a) To unify fragmented health services at all levels into a comprehensive and integrated National Health System
- (b) To promote equity, accessibility, and utilization of health services
- (c) To extend the availability and ensure the appropriateness of health services
- (d) To develop health promotion activities (see below, Exhibit 9b)**
- (e) To develop the human resources available to the health sector
- (f) To foster community participation across the health sector
- (g) To improve health sector planning and the monitoring of health status and services

Exhibit 9b *Health Promotion Objectives for National Health System*

- (d) To develop health promotion activities to:**
- I. promote a healthy environment
 - II. improve the psychological well-being of people and communities
 - III. ensure access to health-related information, community support, and health services for adolescents
 - IV. reduce alcohol and other drug abuse, with particular emphasis on tobacco, glue, cocaine, Mandrax, heroin, and marijuana
 - V. promote healthy behavior to prevent sexually transmitted diseases (STDs) and HIV transmission
 - VI. prevent the transmission of communicable diseases such as tuberculosis and the development of hypertension and diabetes
 - VII. help the disabled to become independent and reach their potential for achieving a socially and economically productive life
 - VIII. reduce the incidence of intentional and unintentional injuries

Source: South Africa Department of Health. White paper for the transformation of the health system in South Africa. 1997.

Appendix *Useful Abbreviations*

ANC	African National Congress
BMI	body mass index
DHS	district health system
DOTS	directly observed treatment, short course
DTP3	third dose of diphtheria toxoid, tetanus toxoid, and pertussis vaccine
ETC	Economics of Tobacco Control Project
FCTC	Framework Convention on Tobacco Control
GDP	gross domestic product
GNU	Government of National Unity
IFP	Inkatha Freedom Party
IHD	ischemic heart disease
MRC	Medical Research Council
NACOSA	National AIDS Coordinating Committee of South Africa
NGO	nongovernmental organization
NP	National Party
NRT	nicotine replacement therapy
NSP	National Strategic Plan
PHC	primary health care
PPP	purchasing power parity
RDP	Reconstruction and Development Program
TB	tuberculosis
UN	United Nations
USD	United States' dollar
WHO	World Health Organization

Appendix *Definitions of Terms Used in Relation to Tobacco*

Bupropion – An antidepressant pharmaceutical used to help people quit smoking.⁹⁴

Carcinogen – A substance that causes cancer. Tobacco contains many potent chemical carcinogens, including tobacco-specific nitrosamines (TSNs), polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs).⁹⁴

Direct costs – Health costs related to diseases caused by tobacco; health-service costs, such as hospital services, physician and outpatient services, prescription drugs, nursing-home services, home health care, allied health care; changed expenditures due to increased utilization of services.⁹⁴

Indirect costs – Productivity costs imposed on a household by tobacco-related illness or premature death; loss of productivity and earnings; household health; psychological costs, such as the effects of grief.⁹⁴

Health warnings – Verbal, written, or visual warnings required by governments on packets or advertisements of all tobacco products.⁹⁴

Nicotine replacement therapy (NRT) – A pharmacological treatment used to aid smoking cessation. NRTs include devices such as transdermal patches, nicotine gum, nicotine nasal sprays, and inhalers.⁹⁴

Passive smoking – Inhaling cigarette, cigar, or pipe smoke produced by another individual. Passive smoking includes second-hand smoke (exhaled by the smoker) and side stream smoke (which drifts off the tip of the cigarette, cigar, or pipe bowl). Also known as environmental tobacco smoke.⁹⁴

Prevalence – Smoking prevalence is the percentage of smokers in the total population. Adult smoking usually is defined as smokers aged 15 years and above.⁹⁴

Price elasticity of demand – The price elasticity of demand (commonly known as price elasticity) measures the percentage change in demand after a one percent change in price. The figure is almost always a negative number. Price elasticity is used to see how sensitive the demand for a good is to a price change. The higher the price elasticity, the more sensitive consumers are to price changes. A high price elasticity suggests that when the price of a good goes up, consumers will buy much less of it, and when the price goes down, consumers will buy much more. A very low price elasticity implies that changes in price have little influence on demand.

Quit line – Phone line staffed by trained personnel who provide support to smokers trying to quit smoking. Often accessible to a country's entire population through toll-free numbers. They are inexpensive to operate, confidential, and can be staffed for long hours. They may help introduce users to other tobacco dependence treatments. Some quit lines follow up with callers, and others have expanded to the internet.⁹⁵

Tobacco attributable health care costs – Health costs (direct and indirect) calculated on the average proportion of particular diseases attributable to tobacco use.⁴⁴

Tobacco attributable mortality – The number of deaths attributable to tobacco use within a specific population.⁹⁴

Tobacco production – Tobacco leaf production in metric tons refers to the actual tobacco leaves harvested from the field, excluding harvesting and threshing losses and any part of the tobacco crop not harvested for any reason.⁹⁴

Tobacco taxes – Taxes levied on tobacco products. There are two basic methods of tobacco taxation:

1. **Nominal or specific taxes** – Taxes based on a set amount of tax per cigarette or gram of tobacco.
2. **Ad valorem taxes** – Taxes assessed as a percentage markup on the retail selling price of tobacco products.

Total tobacco tax refers to a combination of both methods plus any value added tax (VAT) where applicable.⁹⁴ As of 2008, more than four out of five high-income countries taxed tobacco at 51–75% of retail price; fewer than one quarter of low- and middle-income countries taxed tobacco at this rate.⁹⁵

Warning labels – Verbal, written, or visual warnings required by governments on packets or advertisements of all tobacco products.⁹⁴

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