

**Table 5 Prevalence of diarrhoea and use of oral rehydration therapy**

Among children under 5 years of age, the percentage reported by the mother to have had diarrhoea in the past two weeks, and of those with diarrhoea, the percent who were given ORS or home solution by background characteristics, South Africa 1998

Background characteristic	Percentage of children with diarrhoea	Diarrhoea treatment			Children under 5 (n)
		% ORS packets	% Home solution	% Any ORT	
<b>Age of child</b>					
< 6 months	11.1	47.6	12.3	56.7	505
6-11 months	22.1	57.1	14.2	64.9	500
12-23 months	24.0	54.5	17.1	60.0	973
24-35 months	11.6	47.1	17.8	57.2	933
36-47 months	8.2	39.1	10.1	44.1	886
48-59 months	5.0	53.7	24.5	61.4	942
<b>Sex of child</b>					
Male	14.1	50.2	15.0	58.2	2,370
Female	12.3	52.4	17.2	58.5	2,369
<b>Residence</b>					
Urban	10.8	48.8	16.8	55.3	2,374
Non-urban	15.7	52.8	15.5	60.4	2,366
<b>Province</b>					
Western Cape	9.9	(44.5)	(10.1)	(51.2)	396
Eastern Cape	12.7	54.6	13.1	58.8	690
Northern Cape	10.4	(46.5)	(14.9)	(54.1)	97
Free State	9.1	(55.2)	(26.3)	(66.3)	244
KwaZulu Natal	17.8	64.8	16.4	70.5	1,022
North West	12.2	55.6	5.0	55.6	327
Gauteng	9.4	47.2	16.7	55.6	911
Mpumalanga	16.2	45.1	24.0	57.6	361
Northern	14.6	31.0	17.2	41.3	691
<b>Education</b>					
No education	13.5	55.2	20.8	63.0	418
Sub A - Std 3	17.8	44.6	19.2	57.1	605
Std 4 - Std 5	14.0	50.6	14.3	55.9	708
Std 6 - Std 9	13.3	53.4	13.8	59.6	1,950
Std 10	10.3	50.0	18.7	56.0	733
Higher	9.0	(53.2)	(13.8)	(57.0)	325
<b>Population Group</b>					
African	14.2	52.1	16.6	59.4	3,920
Afr. urban	12.0	50.9	17.8	57.8	1,702
Afr. non-urban	15.9	52.7	15.9	60.3	2,218
Coloured	11.5	46.9	12.1	55.5	435
White	5.3	*	*	*	245
Asian	6.5	*	*	*	111
Total	13.2	51.2	16.0	58.4	4,740

Note: Total includes 29 children with ethnic group not stated. Numbers in parentheses refer to figures based on 25-49 cases, while an asterisk indicates a figure based on fewer than 25 cases that has been suppressed

## D. Breastfeeding and Supplementation

Breast milk is the optimal source of nutrients for infants. Children who are exclusively breastfed receive only breast milk. In South Africa, exclusive breastfeeding is recommended from birth to the first 4-6 months of a child's life because it limits exposure to disease agents as well as providing all of the nutrients that a baby requires.

Breastfeeding among South African women is very low and supplementation of breast milk with other liquids and foods begins early. Table 6 shows that of all children aged 0-3 months, only 10 percent receive exclusive breastfeeding, while about half of them are bottle-fed. And among those 4-6 months old, less than two percent are exclusively breastfed, but more than one-third are bottle-fed.

Age of child	Breastmilk and:					Total	Bottle fed	Living children
	Not breastfed	Breast only	Plain water	Other liquids	Solid or mushy food			
0-3 months	16.6	10.4	8.9	48.5	15.6	100.0	48.3	312
4-6 months	20.1	1.2	2.2	40.0	36.5	100.0	37.5	268
7-9 months	33.3	0.9	0.7	19.6	45.5	100.0	30.2	271
10-12 months	29.5	0.0	0.4	12.0	58.2	100.0	23.2	222
Total	24.4	3.5	3.4	31.5	37.2	100.0	35.8	1,073

### III. SEXUAL, REPRODUCTIVE AND WOMEN'S HEALTH

#### A. Sexual Health

Given the high prevalence of sexually-transmitted diseases (STDs) including HIV/AIDS among the South African population (Department of Health, 1999), the 1998 SADHS collected data concerning women's awareness, knowledge and attitudes about AIDS, sexual behaviour and condom use, and the prevalence of STD symptoms among men.

##### *Awareness and Knowledge of HIV/AIDS*

The Women's Questionnaire included a series of questions about HIV/AIDS. Women were first asked if they had ever heard of AIDS and if so, whether they thought they could protect themselves against the disease through certain specific behaviours such as having a good diet or staying with one faithful partner, etc.

Results show that awareness of HIV/AIDS is high; 97 percent of women age 15-49 say they have heard of the disease. However, detailed knowledge of HIV/AIDS which would enable behavioural change to prevent further infections of HIV is not as high. For example, between 8 and 10 percent of women say that staying with one faithful partner and using a condom will not protect them from HIV/AIDS. Whilst 6 percent say that touching a person with AIDS places them at risk of contracting the virus and 21 percent still believe that transmission can take place by sharing public toilets. Women are almost equally divided on the issue of whether avoiding mosquito bites can protect against AIDS: 44 percent say no, 38 percent say yes and the remainder are not sure. As expected, urban women are more knowledgeable about HIV/AIDS than non-urban women.

Table 7 Knowledge of ways to avoid AIDS

Percent distribution of women age 15-49 who have ever heard of AIDS by knowledge of ways to avoid AIDS, according to residence, South Africa 1998

Means of protecting against AIDS	Residence		Total
	Urban	Non-urban	
<b>Having a good diet</b>			
Not true	71.1	56.7	65.5
True	17.3	23.5	19.7
DK/Missing	11.6	19.8	14.7
<b>Staying with one faithful partner</b>			
Not true	7.8	9.7	8.5
True	89.9	83.6	87.4
DK/Missing	2.4	6.7	4.1
<b>Avoid public toilets</b>			
Not true	71.4	55.4	65.2
True	21.1	29.0	24.1
DK/Missing	7.5	15.7	10.6
<b>Using condoms</b>			
Not true	5.5	8.5	6.6
True	91.4	81.2	87.4
DK/Missing	3.2	10.4	5.9
<b>Avoid touching person with AIDS</b>			
Not true	82.8	61.5	74.5
True	10.4	21.8	14.8
DK/Missing	6.8	16.8	10.6
<b>Avoid sharing food</b>			
Not true	78.5	58.4	70.7
True	13.3	24.0	17.5
DK/Missing	8.1	17.6	11.8
<b>Avoid mosquito bites</b>			
Not true	47.8	38.7	44.3
True	35.9	40.0	37.5
DK/Missing	16.3	21.3	18.3
<b>Injection with clean needle</b>			
Not true	4.1	6.7	5.1
True	92.1	83.9	88.9
DK/Missing	3.9	9.4	6.0
<b>Avoid sharing razors</b>			
Not true	7.7	6.4	7.2
True	86.7	84.2	85.7
DK/Missing	5.6	9.4	7.0
Total	100.0	100.0	100.0
Number of women	6,949	4,395	11,344

### *Number of Sexual Partners and Condom Use*

Women interviewed in the SADHS were asked a number of questions about their sexual behaviour including how many sexual partners they had had in the past 12 months, how long ago they last had sex, whether that was with a spouse or a regular or casual partner, and whether they had used a condom that time. These were among the most sensitive questions in the entire interview and, although interviewers were all women, it is difficult to assess the degree to which the respondents answered truthfully.

Data on the number of sexual partners are presented in Table 8 according to marital status.<sup>1</sup> Very few women (3 percent) report having had two or more sexual partners in the 12 months preceding the survey.

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<sup>1</sup>In this report, women who were either formally married or living with a man are considered as married.

Table 8 Number of sexual partners

Percent distribution of women age 15-49 by number of persons with whom they had sexual intercourse in the last 12 months according to background characteristics, South Africa 1998

Background characteristic Number	Currently married women					Currently non-married women					All women									
	0	1	2+	Missing	Total	Mean	0	1	2+	Missing	Total	Mean	0	1	2+	Missing	Total	Mean		
<b>Age</b>																				
15-19	1.1	91.9	5.4	1.5	100.0	1.0	61.6	34.8	2.9	0.7	100.0	0.4	2,176	59.7	36.7	2.9	0.7	100.0	0.4	
20-24	1.1	96.7	2.1	0.2	100.0	1.0	22.6	71.2	3.9	2.2	100.0	0.8	1,610	17.8	76.9	3.5	1.8	100.0	0.9	
25-29	1.2	96.0	2.5	0.4	100.0	1.0	18.7	73.6	4.9	2.7	100.0	0.9	958	10.2	84.5	3.7	1.6	100.0	0.9	
30-34	1.5	96.3	1.9	0.3	100.0	1.0	21.2	69.7	6.7	2.4	100.0	0.9	646	9.2	85.9	3.7	1.1	100.0	1.0	
35-39	1.6	96.2	0.7	1.4	100.0	1.0	27.1	65.0	4.9	3.0	100.0	0.8	522	9.7	86.3	2.1	1.9	100.0	0.9	
40-44	4.1	94.5	0.8	0.6	100.0	1.0	38.5	53.5	3.5	4.5	100.0	0.6	429	15.5	81.0	1.6	1.9	100.0	0.9	
45-49	6.5	92.0	1.3	0.2	100.0	1.0	57.3	39.9	1.0	1.9	100.0	0.4	318	23.1	74.9	1.2	0.7	100.0	0.8	
<b>Marital duration</b>																				
Never married							38.1	56.1	3.7	2.0	100.0	0.7	5,665	38.1	56.1	3.7	2.0	100.0	0.7	
0-4	0.7	95.7	3.1	0.6	100.0	1.0	17.3	69.9	10.8	2.1	100.0	1.0	106	2.2	93.3	3.8	0.7	100.0	1.0	
5-9	1.3	96.8	1.6	0.4	100.0	1.0	29.5	62.3	6.6	1.6	100.0	0.8	150	4.9	92.4	2.2	0.5	100.0	1.0	
10-14	2.1	96.4	1.1	0.4	100.0	1.0	25.3	64.9	6.5	3.3	100.0	0.9	181	5.9	91.3	2.0	0.9	100.0	1.0	
15+	4.3	94.0	0.8	0.9	100.0	1.0	44.0	52.3	2.2	1.5	100.0	0.6	556	12.7	85.1	1.1	1.0	100.0	0.9	
<b>Residence</b>																				
Urban	2.6	95.2	1.5	0.7	100.0	1.0	39.2	54.3	4.1	2.4	100.0	0.7	4,057	23.6	71.8	2.9	1.7	100.0	0.8	
Non-urban	2.3	95.5	1.7	0.5	100.0	1.0	35.4	59.6	3.6	1.4	100.0	0.7	2,601	20.9	75.4	2.7	1.0	100.0	0.8	
<b>Education</b>																				
No education	5.2	93.1	1.1	0.6	100.0	1.0	35.1	56.1	3.1	5.7	100.0	0.7	286	15.8	79.9	1.9	2.4	100.0	0.9	
Sub A - Std 3	1.6	95.3	2.6	0.5	100.0	1.0	35.9	58.4	4.6	1.1	100.0	0.7	552	16.3	79.6	3.5	0.7	100.0	0.9	
Std 4 - Std 5	3.0	94.5	1.8	0.6	100.0	1.0	42.1	51.3	4.2	2.5	100.0	0.6	863	23.8	71.5	3.1	1.6	100.0	0.8	
Std 6 - Std 9	2.6	95.1	1.8	0.6	100.0	1.0	40.6	54.1	3.9	1.4	100.0	0.6	3,305	26.8	68.9	3.2	1.1	100.0	0.8	
Std 10	1.5	97.2	0.4	0.8	100.0	1.0	29.5	64.7	2.9	2.9	100.0	0.7	1,174	18.6	77.4	2.0	2.1	100.0	0.8	
Higher	1.3	97.3	0.6	0.8	100.0	1.0	34.1	58.9	5.0	2.0	100.0	0.7	478	18.5	77.2	2.9	1.4	100.0	0.9	
<b>Population Group</b>																				
African	2.6	95.0	1.8	0.6	100.0	1.0	32.3	61.3	4.4	2.1	100.0	0.7	5,519	20.5	74.6	3.3	1.5	100.0	0.8	
Afr. urban	2.6	94.9	1.8	0.6	100.0	1.0	30.4	62.1	4.8	2.6	100.0	0.7	3,063	20.1	74.3	3.7	1.9	100.0	0.8	
Afr. non-urban	2.5	95.1	1.8	0.6	100.0	1.0	34.6	60.2	3.8	1.4	100.0	0.7	2,456	21.0	75.0	2.9	1.1	100.0	0.8	
Coloured	2.7	96.0	0.9	0.4	100.0	1.0	56.9	39.1	1.3	2.6	100.0	0.4	648	31.9	65.3	1.1	1.6	100.0	0.7	
White	2.0	96.9	0.7	0.4	100.0	1.0	73.1	24.8	2.1	0.0	100.0	0.3	301	25.3	73.2	1.2	0.2	100.0	0.8	
Asian	2.7	94.7	0.4	2.2	100.0	1.0	81.1	18.9	0.0	0.0	100.0	0.2	156	32.9	65.5	0.2	1.4	100.0	0.7	
Total	2.5	95.3	1.5	0.6	100.0	1.0	37.7	56.4	3.9	2.0	100.0	0.7	6,658	22.5	73.2	2.9	1.4	100.0	0.8	
																				11,735

The figure is only slightly higher among currently unmarried women (4 percent) than among married women (2 percent). Moreover, there are only very minor differences in the number of sexual partners across background characteristics. It is interesting to note that almost 40 percent of unmarried women report having no partners during the previous year.

Women were also asked about condom use during the most recent sexual intercourse. As shown in Table 9, overall, only 8 percent of women reported that their partner had used a condom during their last sexual intercourse. Somewhat more encouraging, however, is that condom use is considerably higher for sexual encounters with non-marital partners. Among women whose most recent sexual intercourse was with a boyfriend or casual acquaintance, 16 percent reported that they had used condoms compared to 6 percent who last had sex with their husband (or the man they live with).

Younger women and women living in urban areas are more likely to use condoms than other women. Condom use is also higher among women in Free State, Gauteng, Mpumalanga, and Northwest Provinces. As might be expected, women with more education are also more likely than less educated women to have used a condom the last time they had sex. Overall, condom use is highest among African women, followed by coloured women and white women. It is lowest among Asian women, although they are more likely than coloured or white women to use condoms with their husbands.

### ***Prevalence of Symptoms of Sexually-transmitted Diseases Among Men***

The prevalence of sexually-transmitted diseases (STDs) is very high in South Africa. In order to obtain a very rough proxy measure of the prevalence of these diseases, all adult men interviewed were asked if they had had symptoms of STDs in the three months prior to the survey. The symptoms asked about were painful urination or penile discharge (symptoms associated with gonorrhoea) and sores in the genital area (symptoms similar to those of syphilis). Because STDs are likely to be asymptomatic in women, the questions were only asked of men.

Twelve percent of adult men in South Africa report having recently had symptoms associated with STDs (Table 10). Ten percent report having had painful urination or a discharge from the penis, while five percent have had genital sores in the three months preceding the survey. Levels are higher among non-urban men, men in KwaZulu-Natal and Mpumalanga Provinces, and African men. STD-type symptoms are also more prevalent among less well-educated men than among those with matric or a higher education.

## **B. Fertility and Contraceptive Use**

### ***Fertility Levels***

All women age 15-49 who were interviewed with the Women's Questionnaire were asked to give a retrospective reproductive history. To encourage complete reporting, each woman was first asked about the number of sons and daughters living with her, the number living elsewhere, the number who had died and the number of pregnancies lost before full term. She was then asked for a history of all her pregnancies, including the month and year in which each child was born, the child's name, sex and, if dead, the age at death, and, if alive, the current age and whether the child was living with the mother. For miscarriages and stillbirths, women were asked for the month and year of termination and the length of gestation.

**Table 9 Use of condoms**

Among women aged 15-49 who had sexual intercourse in the 12 months preceding the survey, the percentage who ever used condoms, and percentage who used condom during last sexual intercourse, according to type of partner and background characteristics, South Africa 1998

Background characteristic	Ever used condoms	Number	Used condom during last sex with:					
			Spouse	Number	Non spouse	Number	Any partner	Number
<b>Age</b>								
15-19	28.4	854	(18.6)	28	21.2	827	19.5	854
20-24	32.4	1,628	9.3	274	18.7	1,354	14.4	1,628
25-29	28.4	1,597	8.8	660	14.6	937	7.6	1,597
30-34	27.5	1,433	6.5	805	17.1	627	6.6	1,433
35-39	19.7	1,391	6.9	910	9.0	481	2.6	1,391
40-44	17.0	1,018	4.3	678	10.7	339	3.5	1,018
45-49	15.9	696	2.6	511	14.0	185	3.0	696
<b>Residence</b>								
Urban	31.2	5,207	6.5	2,394	20.3	2,813	10.0	5,207
Non-urban	16.2	3,410	6.1	1,472	10.6	1,938	5.5	3,410
<b>Province</b>								
Western Cape	23.4	820	1.8	425	17.9	395	8.1	820
Eastern Cape	14.3	1,131	5.1	492	11.4	639	6.1	1,131
Northern Cape	14.1	153	4.1	77	10.8	76	5.0	153
Free State	32.9	528	11.8	290	26.9	238	10.9	528
KwaZulu Natal	22.2	1,667	5.5	607	11.6	1,061	6.7	1,667
North West	26.5	668	9.0	277	16.9	391	9.0	668
Gauteng	34.5	2,028	6.3	950	22.1	1,077	10.4	2,028
Mpumalanga	24.1	670	9.5	272	16.8	397	9.5	670
Northern	23.0	952	6.8	475	14.3	477	6.4	952
<b>Education</b>								
No education	6.9	593	2.2	305	3.6	288	0.9	593
Sub A - Std 3	9.6	984	3.3	498	5.3	486	2.3	984
Std 4 - Std 5	15.0	1,157	5.6	586	11.9	571	5.1	1,157
Std 6 - Std 9	25.8	3,627	6.9	1,439	17.3	2,188	9.3	3,627
Std 10	36.1	1,526	9.0	642	20.2	884	11.3	1,526
Higher	52.3	729	8.5	396	35.1	333	15.5	729
<b>Population Group</b>								
African	22.8	6,853	7.5	2,623	16.2	4,230	9.2	6,853
Afr. urban	28.5	3,718	8.2	1,321	20.5	2,398	12.2	3,718
Afr. non-urban	15.9	3,134	6.8	1,302	10.5	1,832	5.6	3,134
Coloured	19.5	777	2.9	434	14.6	343	5.6	777
White	49.6	673	4.7	551	30.7	122	4.3	673
Asian	46.0	266	5.1	232	(14.2)	33	1.8	266
Total	22.2	8,617	6.4	3,866	16.4	4,750	8.2	8,617

Note: Total includes a few women whose ethnic group was not stated. Numbers in parentheses are based on 25-49 cases.

Total fertility rates for the survey are calculated directly from the pregnancy history data and are shown in Table 11, along with the percentage of women who were pregnant at the time of the survey and the mean number of children ever born to women age 40-49.

Table 10 Symptoms of sexually transmitted diseases in men

Percentage of men age 15 and over who report having had painful urination or penile discharge, genital sores or either in the three months preceding the survey, according to background characteristics, South Africa 1998

Background characteristic	Percent with painful urination/ discharge	Percent with genital sores	Percent with either	Number of men
<b>Age</b>				
15-24	10.4	5.6	12.1	1,816
25-34	11.6	6.0	13.9	1,123
35-44	10.4	5.3	12.0	1,005
45-54	9.2	5.0	10.6	701
55-64	10.1	2.6	10.3	518
65+	9.2	3.2	10.1	507
<b>Residence</b>				
Urban	8.1	3.4	9.1	3,569
Non-urban	14.3	7.9	16.6	2,102
<b>Province</b>				
Western Cape	4.8	1.4	5.6	721
Eastern Cape	13.8	3.6	15.1	758
Northern Cape	6.1	1.1	6.7	135
Free State	13.3	6.0	15.2	444
KwaZulu Natal	16.6	10.5	18.9	1,064
North West	6.6	5.0	8.4	551
Gauteng	4.8	1.9	5.5	1,099
Mpumalanga	17.1	8.6	20.1	377
Northern	9.5	5.3	11.5	521
<b>Education</b>				
No education	12.7	6.3	13.5	562
Sub A - Std 3	16.2	7.7	18.5	777
Std 4 - Std 5	11.1	6.3	13.0	755
Std 6 - Std 9	10.3	4.6	11.9	2,297
Std 10	5.9	3.4	7.0	801
Higher	4.0	2.2	5.0	440
<b>Population Group</b>				
African	10.6	4.8	12.1	2,375
Afr. urban	15.2	8.6	17.7	1,882
Afr. non-urban	12.6	6.5	14.6	4,257
Coloured	4.8	1.3	5.6	637
White	1.7	0.1	1.7	564
Asian	3.4	0.4	3.8	195
Total	10.4	5.0	11.9	5,671
Total includes cases with education and ethnic group not stated				

The total fertility rates are for the three-year period before the survey, a period covering principally early 1995 to early 1998. The total fertility rate is the sum of the age-specific rates and is a useful measure of the level of recent fertility. It represents the number of children a woman would have by the end of her reproductive years if she were to bear children at the currently observed age-specific rates.

The total fertility rate for the three-year period before the survey is 2.9. Differentials in fertility levels are sizeable. The total fertility rate among non-urban women (3.9) is almost double that for urban women (2.3). Fertility levels are also higher in Northern, Eastern Cape, and KwaZulu-Natal Provinces and lowest in Free State, Western Cape and Gauteng Provinces. As expected, fertility declines as education increases. The total fertility rate among women with no education is 4.5, compared to 1.9 for women who have attended at least some university-level education.

Fertility also varies by ethnic group. The total fertility rate is 3.1 among African women, 2.5 for coloureds and 1.9 for whites. Unfortunately, despite attempts to design the sample so as to over sample Asian households, the sample of Asian women was too small to allow a reliable estimate of the total fertility rate. Less than four percent of South African women were pregnant at the time of the survey. Differences by background characteristics reflect those mentioned above for fertility.

The effect of the higher fertility levels prevailing in the past is evident in the mean number of children ever born to women in their 40s. The difference between the mean number of children ever born to women 40-49 and the total fertility rate is almost one child, indicative of a gradual decline in fertility in South Africa over the past two decades.

### *Contraceptive Use*

In the 1998 SADHS, a series of questions was asked of women age 15-49 about family planning knowledge, ever use, and current use. Respondents were first asked to name all of the methods that they had heard about. For methods not mentioned spontaneously, the interviewer read

a description of the method and asked if the respondent had heard of the method. For each method which they recognised, respondents were asked if they had ever used the method. Finally, women were asked if they were currently using a method, and, if so, where they had obtained the method that they were using.

Knowledge of at least one family planning method is universal among South African women (Table 12).

**Table 11 Fertility by background characteristics**

Total fertility rate for the three years preceding the survey, percentage currently pregnant and mean number of children ever born to women 40-49 years of age, by selected background characteristics, South Africa 1998

Background characteristic	Total fertility rate <sup>1</sup>	Percent currently pregnant <sup>1</sup>	Mean number of children ever born to women age 40-49
<b>Residence</b>			
Urban	2.3	2.7	3.2
Non-urban	3.9	4.7	4.7
<b>Province</b>			
Western Cape	2.3	3.2	3.0
Eastern Cape	3.5	3.4	4.0
Northern Cape	2.7	3.6	3.6
Free State	2.2	3.6	3.6
KwaZulu Natal	3.3	4.3	4.0
North West	2.4	3.2	3.7
Gauteng	2.3	2.2	3.2
Mpumalanga	3.1	4.6	4.5
Northern	3.9	4.6	4.9
<b>Education</b>			
No education	4.5	3.3	4.9
Sub A - Std 3	3.9	4.8	4.4
Std 4 - Std 5	3.5	4.0	4.1
Std 6 - Std 9	2.7	3.0	3.2
Std 10	2.2	3.5	2.4
Higher	1.9	3.8	2.5
<b>Population Group</b>			
African	3.1	3.7	4.1
Afr. urban	2.4	2.8	3.5
Afr. non-urban	4.0	4.7	4.9
Coloured	2.5	3.5	3.2
White	1.9	2.5	2.5
Total	2.9	3.5	3.7

Note: The number of Asian women interviewed was too small to provide a reliable measure of the total fertility rate.  
<sup>1</sup> Women age 15-49 years

With regard to knowledge of specific methods, virtually all women have heard about the pill and injectables, while almost 90 percent have heard about condoms. Around 70 percent of all women know about the IUD and female sterilisation. Male sterilisation is less well known than the other modern methods, while vaginal methods (foam, diaphragm, etc.) are the least widely known. About one-third of all women have heard about withdrawal, while one-quarter know about periodic abstinence or the rhythm method and 12 percent know about contraceptive herbs. Five percent of women mentioned methods that were not on the list, mostly traditional methods like strings, or Coke.

Three-quarters of reproductive age women in South Africa have had experience in using family planning methods (Table 12). Almost all of the women who have ever used a method have used a modern contraceptive. Injection is by far the most commonly used method, having been used by 57 percent of all women. The pill is the next most widely used method, having been used by 38 percent of all women. Eighteen percent of women have used condoms.

Half of all women in South Africa are currently using a contraceptive method. By far the most widely used method is the injection (27 percent), followed by the pill and female sterilisation (9 percent each). As expected, contraceptive use is higher among currently married women than all women and is highest among women who were sexually active in the four weeks before the survey.

Survey data indicate that some women are much more likely to be using contraception than others (see Table 13). Contraceptive use is highest among sexually active women in their teens and 20s, two-thirds of whom are currently using some method of family

planning. The drop in contraceptive use among older women may reflect declining fecundity. The injection is by far the most popular method among younger women and it is not until women reach their 40s that female sterilisation overtakes the injection in levels of use.

The level of current contraceptive use is higher in urban areas (67 percent) than in rural areas (54 percent).

Differentials in current contraceptive use by province are large. Almost three-quarters of sexually active women in Western Cape Province are using some method of contraception, compared to only 55 percent of those in Northern Province. Contraceptive use increases consistently with educational level of women. Thirty-five percent of sexually active women with no formal education are currently using a method, compared to 79 percent of those with higher education. Asian women are the most likely to be using contraception, followed by whites, coloureds, and Africans. Unlike African and coloured women who are most likely by far to be using injections as a method, Asian and white women tend to use the pill and female sterilisation, with very few using injections. Male sterilisation is also commonly used by white couples only. Contraceptive use also varies by family size, increasing with the number of living children a woman has.

**Table 12 Knowledge of methods, ever use and current use of methods**

Percentage of all women, currently married women and sexually active women age 15-49 knowing of, ever using, and currently using contraceptive methods, South Africa 1998

Contraceptive method	Percent who know method			Percent who ever used			Percent currently using		
	All	CM	SA	All	CM	SA	All	CM	SA
<b>Any method</b>	96.7	98.1	98.6	75.0	84.6	87.3	50.1	56.3	62.1
<b>Any modern method</b>	96.5	98.0	98.5	73.9	83.2	86.1	49.3	55.1	61.2
Pill	93.2	95.4	95.8	37.6	49.3	48.2	9.3	10.6	13.2
IUD	71.4	79.5	80.2	8.5	13.1	12.2	1.2	1.8	1.9
Injections	94.4	96.7	97.3	57.0	59.1	64.5	27.3	23.2	30.1
Diaph./Foam/Jelly	16.4	21.1	19.6	0.8	1.3	1.3	0.0	0.0	0.0
Condom	88.7	89.1	91.6	17.8	19.2	23.0	1.9	1.7	2.3
Female sterilisation	67.9	77.8	75.0	8.7	15.8	12.0	8.7	15.8	12.0
Male sterilisation	35.3	44.1	40.6	1.3	2.8	2.2	0.9	2.1	1.7
<b>Any traditional method</b>	37.2	45.7	44.9	9.8	13.4	13.1	0.6	0.9	0.7
Periodic abstinence	25.3	30.9	31.0	4.2	5.0	5.3	0.2	0.3	0.3
Withdrawal	30.5	39.3	38.0	7.3	10.7	10.1	0.4	0.6	0.4
Herbs	12.4	14.2	13.9	0.9	1.1	0.9	0.1	0.2	0.2
Other methods	4.8	5.4	6.0	1.2	1.6	1.6	0.1	0.1	0.1
Number of women	11,735	5,077	6,062	11,735	5,077	6,062	11,735	5,077	6,062

CM = Currently married or living with a man

SA= Sexually active in last 4 weeks

The SADHS included a question to ascertain whether women were aware that current law allows for abortions up to 12 weeks of pregnancy. Fifty-three percent of all women know that early abortions are legal, while 19 percent believe that such abortions are not legal and 28 percent do not know (data not shown).

Table 13. Current use of contraception by background characteristics

Percent distribution of sexually active women by contraceptive method currently being used, according to background characteristics, South Africa 1998

Background characteristic	Any method		Pill	IUD	Injections	Condom	Sterilisation		Any tradition. method	Periodic abstinence	Withdrawal	Herbs	Other methods	Not currently using	Total	Number
	Any method	Any modern method					Female	Male								
<b>Age</b>																
15-19	66.4	64.4	9.3	0.5	50.7	4.0	0.0	0.0	2.0	0.7	0.7	0.4	0.2	33.6	100.0	412
20-24	68.6	68.0	13.8	0.2	48.9	4.2	0.7	0.6	0.6	0.0	0.4	0.1	0.1	31.4	100.0	960
25-29	65.4	64.3	17.9	1.3	39.6	1.1	3.4	1.0	1.1	0.5	0.2	0.3	0.0	34.6	100.0	1,122
30-34	63.8	62.9	17.2	2.4	29.1	2.7	9.9	1.6	0.9	0.3	0.4	0.2	0.1	36.2	100.0	1,102
35-39	62.4	61.1	12.7	3.2	21.3	1.8	19.4	2.7	1.3	0.3	0.7	0.1	0.1	37.6	100.0	1,073
40-44	56.6	55.9	8.8	2.4	13.8	0.9	26.5	3.4	0.8	0.3	0.4	0.0	0.1	43.4	100.0	838
45-49	45.5	45.1	5.2	2.6	6.1	2.4	26.1	2.7	0.4	0.0	0.4	0.0	0.0	54.5	100.0	554
<b>Residence</b>																
Urban	66.8	66.0	15.2	2.6	28.4	2.7	14.7	2.3	0.8	0.4	0.3	0.1	0.0	33.2	100.0	3,855
Non-urban	53.9	52.7	9.7	0.6	32.9	1.6	7.4	0.6	1.2	0.1	0.7	0.2	0.1	46.1	100.0	2,207
<b>Province</b>																
Western Cape	73.9	73.7	11.3	1.3	32.2	2.2	23.9	2.7	0.2	0.2	0.0	0.0	0.0	26.1	100.0	594
Eastern Cape	60.2	59.9	9.0	1.4	36.6	1.4	9.7	1.9	0.3	0.1	0.1	0.0	0.1	39.8	100.0	691
Northern Cape	65.9	65.9	11.4	1.2	30.0	0.4	21.0	1.9	0.0	0.0	0.0	0.0	0.0	34.1	100.0	118
Free State	68.5	67.9	13.1	0.6	36.4	3.0	10.8	4.0	0.6	0.0	0.6	0.0	0.0	31.5	100.0	384
KwaZulu Natal	58.3	57.1	13.5	1.2	26.1	2.5	13.4	0.3	1.2	0.2	0.9	0.0	0.2	41.7	100.0	1,146
North West	69.8	69.6	16.1	2.9	41.4	1.6	6.7	0.9	0.2	0.2	0.0	0.0	0.0	30.2	100.0	470
Gauteng	62.0	60.9	15.8	3.7	22.8	1.1	13.1	2.8	1.1	0.5	0.5	0.2	0.0	38.0	100.0	1,553
Mpumalanga	55.5	53.2	11.0	0.7	30.1	2.2	8.1	1.2	2.2	1.1	0.3	0.4	0.5	44.5	100.0	510
Northern	54.9	53.3	12.8	0.8	33.8	2.1	3.9	0.0	1.6	0.0	0.8	0.8	0.0	45.1	100.0	595
<b>Education</b>																
No education	35.1	33.1	3.7	0.0	20.1	0.5	8.8	0.0	2.0	0.5	1.4	0.0	0.1	64.9	100.0	455
Sub A-Std 3	45.0	43.7	6.4	0.4	22.7	1.6	12.6	0.0	1.3	0.0	1.1	0.2	0.0	55.0	100.0	704
Std 4-Std 5	53.9	53.6	8.7	0.4	31.6	1.1	11.3	0.4	0.3	0.1	0.1	0.1	0.0	46.1	100.0	813
Std 6-Std 9	65.7	64.6	11.7	2.1	34.2	2.2	13.2	1.2	1.1	0.3	0.4	0.3	0.1	34.3	100.0	2,416
Std 10	73.5	73.1	21.7	3.3	31.8	3.3	9.1	3.9	0.4	0.0	0.1	0.1	0.2	26.5	100.0	1,099
Higher	79.4	78.1	25.7	3.8	23.9	4.4	15.5	4.8	1.3	1.3	0.0	0.0	0.0	20.6	100.0	574
<b>Population Group</b>																
African	58.6	57.6	11.5	1.5	35.1	1.8	7.7	0.0	1.0	0.3	0.5	0.2	0.1	41.4	100.0	4,636
Afr. urban	63.3	62.4	13.1	2.1	35.7	1.9	9.5	0.0	0.9	0.4	0.3	0.2	0.0	36.7	100.0	2,646
Afr. non-urban	52.4	51.2	9.2	0.6	34.3	1.7	5.4	0.0	1.2	0.1	0.8	0.2	0.2	47.6	100.0	1,991
Coloured	68.8	68.4	11.3	2.0	27.4	3.1	22.4	2.1	0.4	0.2	0.0	0.0	0.2	31.2	100.0	564
White	76.2	74.9	19.6	4.2	4.7	4.1	26.9	15.4	1.3	0.7	0.4	0.0	0.2	23.8	100.0	587
Asian	80.1	80.1	34.4	4.5	3.6	5.3	31.9	0.4	0.0	0.0	0.0	0.0	0.0	19.9	100.0	237
<b>Living kids</b>																
None	50.5	49.3	13.3	0.4	30.7	4.3	0.5	0.1	1.2	0.6	0.3	0.2	0.0	49.5	100.0	1,113
1	59.9	59.5	15.6	1.5	38.0	2.5	1.3	0.5	0.4	0.2	0.1	0.1	0.1	40.1	100.0	1,351
2	68.4	66.9	16.0	2.8	30.0	2.4	11.6	4.2	1.5	0.5	0.5	0.3	0.1	31.6	100.0	1,452
3	69.6	68.8	11.4	3.6	26.5	1.6	23.5	2.2	0.8	0.1	0.6	0.1	0.1	30.4	100.0	953
4+	61.9	61.0	8.4	1.2	23.4	0.7	26.2	1.1	0.9	0.0	0.8	0.0	0.1	38.1	100.0	1,193
Total	62.1	61.2	13.2	1.9	30.1	2.3	12.0	1.7	1.0	0.3	0.4	0.2	0.1	37.9	100.0	6,062

## C. Violence Against Women

The 1998 SADHS contained a series of questions on the treatment of women, covering economic, physical and sexual abuse. To encourage more complete reporting of physical violence by spouses, all women were asked about experiences of violence in the past year and those who did not report physical violence were asked if they had ever been hit by a husband or boyfriend. Those who reported non-partner violence were asked further questions which provided opportunities of disclosure of partner violence.

The regular non-provision of money for food, rent or bills whilst having money for other things was used as an indicator of economic maltreatment. One in five currently married women reported such abuse. It was more common amongst less educated, non-urban, African, and younger women and those residing in the Free State and KwaZulu-Natal.

As Table 14 shows, one in eight women (13 percent) reported having been beaten by a partner. Half of these (6 percent of ever-partnered women) reported abuse in the last year and 43 percent of those beaten in the past year (3 percent of ever-partnered women) reported needing medical attention as a result of such beatings. Among women who had ever been pregnant, 4 percent reported that they had been physically abused during pregnancy. An indicator of general levels of physical violence in communities was given by the question on experience of physical violence by people other than current or previous partners. Four percent of all women reported this in the year prior to the survey. Surprisingly, the prevalence of rape is reportedly low for all women. Only four percent of all women reported ever having been raped.

**Table 14 Treatment of women**

Percentage of women who report various types of mistreatment, according to background characteristics, South Africa 1998

Background characteristic	Partner not provided money in last year	No. currently married women	Abuse by partner in last year	Ever abused by partner	Needed medical attention	No. ever had sex	Abuse by non-partner in last year	Ever raped	All women	Abuse in pregnancy	No. ever pregnant
<b>Age</b>											
15-19	22.3	73	7.3	11.9	29.1	1,017	9.3	4.9	2,249	4.7	308
20-24	22.4	465	7.9	14.2	37.4	1,856	3.6	4.9	2,075	4.3	1,246
25-29	19.8	900	6.0	12.0	48.7	1,801	2.6	5.1	1,857	4.2	1,542
30-34	18.1	1,008	7.4	14.9	38.5	1,636	1.5	5.3	1,654	3.5	1,564
35-39	19.7	1,114	6.5	12.8	43.0	1,624	2.1	3.6	1,636	3.5	1,576
40-44	18.1	865	4.0	10.3	48.8	1,290	1.6	2.8	1,294	2.2	1,250
45-49	18.2	652	3.5	9.7	80.2	965	2.7	3.2	970	4.3	932
<b>Residence</b>											
Urban	17.4	3,038	7.0	14.8	41.8	6,171	3.5	5.0	7,095	4.5	5,016
Non-urban	22.0	2,039	5.3	9.1	44.4	4,019	4.0	3.6	4,640	2.4	3,401
<b>Province</b>											
Western Cape	13.6	543	8.0	16.9	38.6	1,014	5.1	6.5	1,193	7.5	816
Eastern Cape	18.0	583	5.4	8.7	39.1	1,367	2.7	2.9	1,566	2.9	1,071
Northern Cape	18.3	118	7.2	13.2	43.4	209	7.1	3.8	253	3.1	190
Free State	25.2	355	7.3	12.4	28.9	662	2.8	2.6	763	2.5	550
KwaZulu Natal	25.3	955	5.4	10.2	44.8	1,969	3.5	3.3	2,364	3.0	1,708
North West	15.5	352	4.2	6.8	41.4	788	3.0	2.3	909	1.5	653
Gauteng	17.5	1,224	7.3	17.8	44.0	2,311	3.2	6.5	2,552	5.2	1,899
Mpumalanga	19.4	309	7.6	15.2	55.1	745	4.7	7.1	819	2.4	592
Northern	18.3	639	5.3	8.8	44.6	1,125	5.0	3.3	1,316	2.5	939
<b>Education</b>											
No education	22.4	518	4.6	9.4	38.9	783	1.6	2.6	804	2.5	755
Sub A - Std 3	25.3	739	6.5	13.5	57.8	1,225	2.8	3.8	1,291	3.3	1,136
Std 4 - Std 5	23.5	762	7.5	15.2	47.1	1,412	4.6	4.0	1,625	3.7	1,241
Std 6 - Std 9	16.9	1,876	7.2	12.9	38.7	4,241	4.7	4.9	5,181	4.2	3,374
Std 10	18.5	748	5.2	11.9	36.6	1,716	2.3	4.1	1,922	3.7	1,294
Higher	9.1	434	2.9	9.5	50.7	812	3.0	5.5	912	2.5	617
<b>Population Group</b>											
African	22.8	3,628	6.1	11.3	43.1	8,108	3.5	3.8	9,147	2.8	6,599
Afr. urban	22.7	1,810	7.0	13.9	42.9	4,406	3.1	4.4	4,873	3.5	3,480
Afr. non-urban	22.9	1,818	5.0	8.3	43.5	3,702	4.0	3.2	4,274	2.0	3,119
Coloured	16.4	553	10.3	19.7	43.9	979	5.8	6.5	1,201	8.2	870
White	4.3	615	3.8	15.8	36.5	741	4.2	8.7	916	6.4	626
Asian	10.1	250	4.3	12.6	35.2	305	2.9	2.3	406	3.5	274
<b>Total</b>	<b>19.2</b>	<b>5,077</b>	<b>6.3</b>	<b>12.5</b>	<b>42.6</b>	<b>10,190</b>	<b>3.7</b>	<b>4.4</b>	<b>11,735</b>	<b>3.7</b>	<b>8,417</b>

Under-reporting of gender violence is a well recognised problem in surveys and the likelihood of this should be taken into account in interpreting these results. The prevalence of abuse reported in a study conducted in the Eastern Cape, Northern and Mpumalanga Provinces using a randomly selected sub-set of enumeration areas from the SADHS sample was substantially higher. For example, in the Eastern Cape, 27 percent of ever-partnered women reported having experienced physical abuse from a partner vs. only 9 percent from SADHS data; in Mpumalanga, the levels were 29 percent from the special study compared to 15 percent from the SADHS, and in Northern Province the rates were 18 percent from the special study versus 9 percent in the SADHS (Jewkes, Penn-Kekana & Levin, 1998). The usual explanations for under-reporting are concern about recrimination, fear of identifying oneself as an abused woman due to a socialisation that encourages women to accept chastisement as a male prerogative, feelings of shame about the assault and having provoked it, perceptions that it is a private matter and loyalty to the abuser.

## **D. Maternal Health**

Proper care during pregnancy and childbirth are important to the health of both a mother and her baby. To obtain data on these issues, the SADHS included questions on tetanus toxoid vaccinations, antenatal care, and assistance received at delivery for each birth that a woman reported during the five-year period before the survey.

Tetanus toxoid injections are given during pregnancy in order to prevent neonatal tetanus, a frequent cause of infant deaths when sterile procedures are not observed in cutting the umbilical cord following delivery. Table 15 shows that, for 59 percent of births in the five-year period before the survey, the mother received at least one tetanus toxoid injection during pregnancy. Tetanus toxoid coverage is lower for births in urban areas, births in Western Cape and Gauteng Provinces, births to more educated women and births to white women. It is likely that many of the women who do not report having had injections during pregnancy may be protected from tetanus from injections given either during previous pregnancies or during youth.

Antenatal care from a trained provider is important to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery. To be most effective, there should be regular antenatal care throughout a pregnancy. Overall, the 1998 SADHS found that antenatal care was received from a doctor or a nurse or midwife for 94 percent of the births during the five-year period before the survey (Table 15). Antenatal care from nurses and midwives is much more common than care provided by doctors. While antenatal care coverage is high among all groups of women, the type of provider varies considerably. For example, most antenatal care for non-urban births (77 percent) is provided by nurses and midwives, while for urban births, fewer women (54 percent) receive care from nurses and midwives. Similarly, in Eastern Cape and Northern Provinces, almost all the antenatal care is obtained from nurses and midwives, while in Gauteng, Western Cape and Northern Cape Provinces, more than 40 percent of care is provided by doctors.

Most women in South Africa receive medical assistance at delivery. Of all women who gave birth during the five years preceding the survey, 84 percent received medical assistance from either a doctor, a nurse or a midwife. Most assistance at delivery was, however, received from trained nurses and midwives. Only 30 percent received assistance from a doctor. As with antenatal care, urban women, those in Western Cape and Gauteng Provinces, women with more education and white and Asian women are more likely than others to have assistance from a doctor during delivery. Despite progress in the provision of maternal health care, the maternal mortality ratio remains high at 150 deaths per 100,000 live births. It is important to understand the contributing factors to this high ratio. Hopefully, the Confidential Enquiry into the Causes of Maternal Deaths in South Africa instituted by the Minister of Health in 1997 will provide more information on this important topic.

**Table 15 Tetanus toxoid vaccination, antenatal care and assistance at delivery**

For all births in the five years preceding the survey, the percentage whose mothers received at least one tetanus toxoid injection, antenatal care from a doctor or trained nurse/midwife, and assistance at delivery from a doctor or trained nurse/midwife, by background characteristics, South Africa 1998

Background characteristic	Tetanus toxoid	Antenatal care		Assistance at delivery		Number of births
		From doctor	From nurse/midwife	From doctor	From nurse/midwife	
<b>Maternal age at birth</b>						
<20	63.4	21.2	73.3	23.6	64.5	835
20-34	57.3	31.0	63.3	31.6	52.4	3,407
35+	60.3	26.5	66.7	30.0	52.0	751
<b>Residence</b>						
Urban	46.2	40.9	53.9	42.2	51.2	2,470
Non-urban	71.1	16.8	76.9	18.0	57.5	2,522
<b>Province</b>						
Western Cape	17.8	43.5	48.2	44.4	51.7	401
Eastern Cape	57.4	12.0	82.7	17.8	56.8	741
Northern Cape	53.4	42.1	51.2	38.5	51.8	102
Free State	75.8	34.4	60.4	30.9	57.1	257
KwaZulu Natal	74.9	28.3	66.1	34.1	48.5	1,094
North West	56.3	31.0	63.1	31.4	56.9	340
Gauteng	37.6	44.7	50.1	43.2	50.8	954
Mpumalanga	61.8	33.5	60.5	20.6	55.4	379
Northern	80.8	9.7	84.4	13.7	64.8	724
<b>Education</b>						
No education	70.0	9.9	79.9	14.5	45.2	453
Sub A - Std 3	69.4	19.1	73.2	18.5	54.1	657
Std 4 - Std 5	61.9	21.9	75.0	19.9	60.0	747
Std 6 - Std 9	59.3	26.7	67.7	28.6	60.3	2,041
Std 10	47.8	45.0	49.3	45.1	50.2	759
Higher	37.9	63.3	33.0	70.3	28.7	336
<b>Population Group</b>						
African	65.3	22.8	72.0	24.8	57.3	4,149
Afr. urban	54.1	33.6	62.1	36.0	55.8	1,783
Afr. non-urban	73.7	14.7	79.5	16.4	58.3	2,366
Coloured	31.0	45.1	46.7	40.3	54.5	445
White	11.3	82.1	6.3	89.0	10.0	250
Asian	34.4	65.2	28.2	52.7	46.4	114
<b>Birth order</b>						
1	58.8	31.0	63.9	31.1	61.1	1,578
2-3	55.7	33.0	61.3	33.1	51.8	1,961
4-5	59.1	22.0	72.5	27.4	50.4	874
6+	68.7	18.1	73.7	20.7	51.1	579
Total	58.8	28.7	65.5	30.0	54.4	4,992

## **IV. ADOLESCENT HEALTH**

Adolescence is a period of transition from childhood to adulthood during the second decade of life and is usually referred to as the teen years. Although some researchers define adolescence to include the 10-19 year age group (Bongaarts & Cohen, 1998), in this survey, the 15-19 year age group has been used to define adolescence. This is consistent with the standard definition of adolescence used by the National Health Information Systems of South Africa and the World Health Organisation.

### **A. Adolescent Sexual Behaviour**

All women in the 15-49 year age group were asked whether they have ever been married or lived with a man, the number of sexual partners they had had in the 12 months preceding the survey, the last time they had sex, the type of sexual partner with whom they had their last sex and whether or not a condom was used during last sexual intercourse. The results show that almost all the teenagers in the survey are unmarried; only about 3 percent were either married or living with a partner at the time of the survey.

#### *Number of partners*

The survey shows that most of the teenagers (60 percent) reported having no sexual partner in the year prior to the interview and more than half of them said they had never had sexual intercourse. Only a few teenagers report having had sex with two or more persons in the last 12 months. The mean number of sexual partners during the year preceding the survey is 0.4. About one in five teenagers was sexually active in the month preceding the survey.

#### *Age at first intercourse*

An analysis of the median age at first sexual intercourse shows that most women experience their first sexual intercourse at about the age of eighteen years and rural women experience it earlier than urban women. The age at menarche (the age at which an adolescent girl experiences her first menstruation) for most teenagers is below 15 years.

#### *Teenage pregnancy*

Table 16 shows that by the age of 19 years, 35 percent of all teenagers have been pregnant or have had a child. This represents a very high level of teenage fertility, a continuing source of concern to the government and researchers. Teenage pregnancy is more prevalent among coloured and rural African girls, those with little or no education, and those residing in Mpumalanga, Northern Cape, Northern and Eastern Cape Provinces. Also disturbing is the finding that about one in eight teenage deliveries is by caesarean section.

### **B. Contraceptive Use**

Contraceptive use is quite high among all women aged 15-19, especially those who are sexually active. More than one in four teenagers are currently using a modern method of contraception and among sexually active teenagers, almost two-thirds are currently using a modern contraceptive method (see Table 13). Among teenagers, the injectable contraceptive is the most popular, with half of sexually active women currently using it.

Condom use is quite low among all teenagers whether married or unmarried. However, about one in every five teenage women reported using condom during their last sexual intercourse (see Table 9).

### C. Knowledge of HIV/AIDS

There is a high level of awareness of HIV/AIDS among teenage women in the survey. As many as 95 percent know about AIDS and most of them get their information from the television, radio, friends and health workers. Newspapers and pamphlets also play important roles in their knowledge of AIDS. However, it is disturbing to find that more than half do not know that a healthy-looking person can have AIDS. Only about 13 percent know someone with HIV/AIDS.

### D. Prevalence of Smoking

The prevalence of smoking among teenage men is quite high. About one in seven teenage men smoke cigarettes daily or occasionally. The prevalence is lower among teenage girls. Overall, ten percent of all teenagers smoke.

**Table 16 Adolescent pregnancy and motherhood**

Percentage of women aged 15-19 who are mothers or who have been pregnant by background characteristics, South Africa 1998

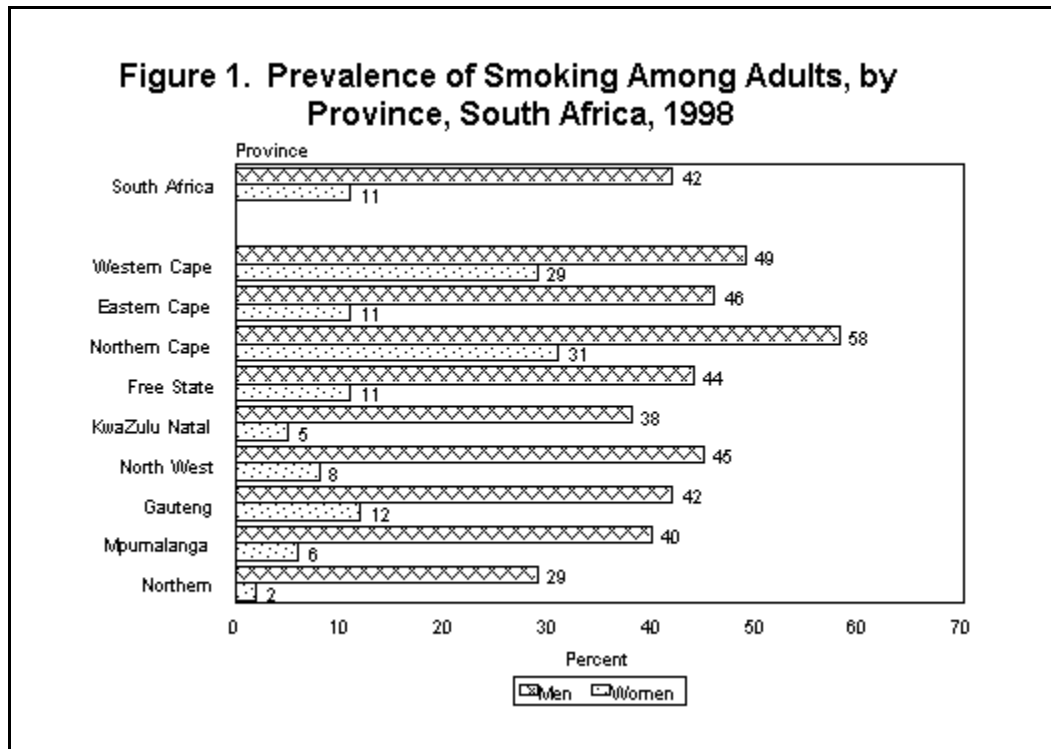
Background characteristic	Percentage who are:		
	Mothers	Ever pregnant	Number of women
<b>Age</b>			
15	2.0	2.4	468
16	5.2	7.9	458
17	10.7	14.2	444
18	19.8	24.6	474
19	30.2	35.1	406
<b>Residence</b>			
Urban	10.5	12.5	1,197
Non-urban	16.3	20.9	1,052
<b>Province</b>			
Western Cape	13.7	16.4	195
Eastern Cape	14.8	18.2	369
Northern Cape	15.2	18.0	44
Free State	8.4	12.6	136
KwaZulu Natal	13.8	16.7	457
North West	11.0	13.4	164
Gauteng	8.9	9.5	377
Mpumalanga	18.8	25.2	190
Northern	14.9	20.0	318
<b>Education</b>			
No education	34.4	34.4	19
Sub A - Std 3	24.7	29.2	114
Std 4 - Std 5	13.8	17.4	336
Std 6 - Std 9	12.9	16.3	1,542
Std 10	7.9	10.1	177
Higher	4.0	4.0	60
<b>Population Group</b>			
African	14.2	17.8	1,802
Afr. urban	11.6	13.7	812
Afr. non-urban	16.4	21.1	990
Coloured	15.7	19.3	208
White	2.2	2.2	162
Asian	2.9	4.3	66
<b>Total</b>	<b>13.2</b>	<b>16.4</b>	<b>2,249</b>

## V. ADULT HEALTH

In the adult health questionnaire of the SADHS, data were collected from men and women age 15 and over on self-reported lifestyle habits that influence health and on commonly occurring chronic adult diseases. The blood pressure, height and weight of participants were measured and participants reported on any illness and injury suffered due to their workplace. This information allows the estimation of the prevalence of some commonly occurring conditions, some of the Department of Health's adult health indicators and an assessment of the quality of health services provided by means of the treatment status of a common condition such as hypertension.

### A. Smoking Patterns

The smoking patterns of the population are shown in Figure 2. The smoking rate is 42 percent for men and 11 percent for women. For both sexes, the rate is 24 percent, which translates into more than 7 million South Africans 15 years or older who smoke regularly. This rate is, however, lower than those reported in much smaller surveys in 1996 of 34 percent (Reddy, Meyer-Weitz & Yach, 1996) and in 1992 of 32 percent (Martin, Steyn & Yach, 1992). This series of findings suggests that the smoking rate in South Africa reached a peak around 1995/6 and has declined since then. During this period, a range of tobacco control activities has been put in place in the country including the promulgation of the first tobacco control legislation.



Higher smoking rates were observed in the urban areas compared to the non-urban areas, particularly for women. For both men and women the more educated groups smoked less than their less educated counterparts. The highest rate of smoking for both men and women was reported in the Northern Cape and Western Cape Provinces and the lowest rates in Northern, Mpumalanga and KwaZulu-Natal Provinces. Marked differences in the smoking rates of women of different population groups were found, with the lowest rate among non-urban African women and the highest rate among coloured women. For men, the inter-ethnic differences were much smaller with again the non-urban African men having the lowest rates while coloured men have the highest rates.

### B. Self-Reported Chronic Conditions

Data on self-reported chronic conditions for men and women are shown in Table 17.1 and Table 17.2. Self-reported rates of chronic conditions are usually found to be different from the rates determined by objective measures of the

reported conditions. This is illustrated where more than double the number of women report suffering from high blood pressure and ischaemic heart diseases (heart attacks and angina) than men. Men most frequently report suffering from high blood pressure, emphysema, asthma and ischaemic heart disease, while women most frequently report the same four conditions along with diabetes. These conditions, with the exception of tuberculosis, are more frequently reported in older people and people living in urban areas.

**Table 17.1 Self-reported chronic conditions men**

Percentage of male respondents age 15 and above who report that they have various chronic health conditions, according to background characteristics, South Africa 1998

Background characteristic	Chronic condition									Number of adults
	Blood pressure	Ischaemic heart disease	Stroke	Hypercholesterolaemia	Diabetes	Emphysema	Asthma	Tuberculosis	Cancer	
<b>Age</b>										
15-24	0.2	0.3	0.0	0.2	0.1	2.3	2.9	0.8	0.0	1,816
25-34	2.7	1.9	0.7	1.2	0.8	2.8	1.9	2.4	0.2	1,123
35-44	7.5	2.8	0.5	1.8	2.5	2.9	4.0	4.1	0.0	1,005
45-54	18.0	4.6	2.0	4.3	5.3	8.6	4.7	5.2	0.5	701
55-64	16.9	6.6	2.0	3.8	7.8	6.6	5.3	4.0	0.1	518
65+	25.0	7.7	2.3	3.7	4.8	8.5	7.2	4.9	1.6	507
<b>Residence</b>										
Urban	9.3	3.1	0.7	2.2	2.9	4.9	4.1	2.6	0.3	3,569
Non-urban	5.5	2.4	1.2	1.2	1.7	3.2	3.2	3.3	0.2	2,102
<b>Province</b>										
Western Cape	9.2	2.8	0.9	1.7	3.2	9.4	4.6	3.2	0.3	721
Eastern Cape	9.0	3.5	0.9	1.3	2.7	5.2	4.7	5.8	0.2	758
Northern Cape	13.2	4.1	1.3	1.8	2.1	5.6	3.2	3.2	0.2	135
Free State	7.2	2.6	0.4	1.4	1.3	0.7	1.3	2.5	0.4	444
KwaZulu Natal	7.5	3.2	1.6	1.7	3.1	3.4	4.9	3.6	0.2	1,064
North West	4.8	2.4	0.3	1.1	0.9	1.4	2.4	1.2	0.0	551
Gauteng	10.7	3.1	0.7	4.0	3.3	5.6	4.5	1.7	0.5	1,099
Mpumalanga	4.9	1.8	1.1	0.9	2.0	2.9	2.9	2.1	0.2	377
Northern	4.4	2.0	0.4	0.2	0.9	1.1	1.3	1.7	0.2	521
<b>Education</b>										
No education	11.6	4.8	2.8	0.3	2.9	4.3	5.4	5.8	0.2	562
Sub A - Std 3	7.2	2.6	0.9	0.4	2.7	4.4	5.7	5.0	0.0	777
Std 4 - Std 5	7.0	2.7	0.4	0.9	1.2	3.2	3.7	3.5	0.2	755
Std 6 - Std 9	6.4	2.1	0.6	1.0	2.3	3.9	2.6	2.2	0.2	2,297
Std 10	8.7	3.0	1.0	3.7	2.7	5.0	4.0	1.5	0.2	801
Higher	10.9	3.5	0.5	8.3	4.0	6.5	3.6	0.4	1.4	440
<b>Ethnicity</b>										
African	5.8	1.9	0.7	0.2	1.5	1.8	3.0	3.0	0.1	4,257
Afr. urban	6.9	1.7	0.5	0.2	1.6	1.5	3.0	2.8	0.2	2,375
Afr. non-urban	4.4	2.0	1.0	0.2	1.5	2.2	3.1	3.2	0.1	1,882
Coloured	9.0	2.9	0.9	1.3	3.1	8.6	4.5	4.5	0.3	637
White	21.1	8.6	1.6	12.4	6.0	16.5	7.7	0.7	1.4	564
Asian	11.9	8.0	1.5	8.4	8.5	6.4	5.5	2.4	0.0	195
<b>Total</b>	<b>7.9</b>	<b>2.9</b>	<b>0.9</b>	<b>1.8</b>	<b>2.4</b>	<b>4.2</b>	<b>3.7</b>	<b>2.9</b>	<b>0.3</b>	<b>5,671</b>

Note: Total includes 40 men with education level missing and 18 men with ethnic group missing.

Table 17.2 Self-reported chronic conditions women

Percentage of female respondents age 15 and above who report that they have various chronic health conditions, according to background characteristics, South Africa 1998

Background characteristic	Chronic condition									Number of adults
	Blood pressure	Ischaemic heart disease	Stroke	Hyper-cholesterolaemia	Diabetes	Emphysema	Asthma	Tuberculosis	Cancer	
<b>Age</b>										
15-24	3.8	1.7	0.2	0.5	0.5	3.5	2.5	1.2	0.0	2,084
25-34	8.0	4.2	0.6	0.8	1.6	3.7	3.2	1.8	0.3	1,721
35-44	15.1	4.3	1.0	0.3	2.7	4.4	3.4	2.0	0.6	1,460
45-54	30.5	7.2	1.0	3.0	7.2	6.5	5.6	2.6	0.9	1,116
55-64	40.9	11.7	1.9	2.5	7.6	6.0	5.2	2.2	1.3	914
65+	42.2	14.7	2.6	2.8	8.9	7.6	5.1	3.1	1.7	861
<b>Residence</b>										
Urban	20.6	5.3	1.1	1.6	4.4	5.8	4.3	1.6	1.0	4,999
Non-urban	15.4	6.9	0.7	0.8	2.7	3.3	3.1	2.6	0.1	3,157
<b>Province</b>										
Western Cape	19.3	5.2	2.4	3.0	4.9	11.4	6.2	2.3	2.0	799
Eastern Cape	18.9	6.5	1.2	1.1	3.5	4.9	4.9	4.3	0.6	1,161
Northern Cape	22.8	5.2	0.9	1.1	2.9	5.5	3.3	2.9	0.4	168
Free State	20.4	7.7	0.8	0.0	2.3	0.3	2.7	1.9	0.3	519
KwaZulu Natal	20.7	7.0	1.1	1.0	5.9	3.1	4.5	1.8	0.4	1,608
North West	14.9	5.4	0.9	0.5	1.1	2.0	3.2	1.3	0.0	647
Gauteng	21.7	5.0	0.4	2.2	4.3	7.9	3.5	1.1	0.8	1,887
Mpumalanga	16.7	8.2	1.2	1.1	2.8	3.9	4.0	1.8	1.1	507
Northern	8.7	4.0	0.5	0.4	1.2	0.7	0.8	1.1	0.0	859
<b>Education</b>										
No education	27.0	11.1	1.6	0.7	6.8	3.1	4.1	2.8	0.3	1,186
Sub A - Std 3	25.6	9.1	1.5	0.5	3.5	4.0	4.9	3.5	0.4	1,088
Std 4 - Std 5	22.5	5.5	0.8	0.7	4.0	2.8	3.9	2.2	0.5	1,136
Std 6 - Std 9	15.6	4.8	0.6	1.6	3.2	4.4	3.3	1.6	0.6	3,094
Std 10	10.1	2.8	0.7	1.9	2.1	8.1	2.8	1.0	1.1	1,120
Higher	11.7	2.2	1.4	3.1	2.5	10.6	6.6	0.7	1.7	495
<b>Population Group</b>										
African	17.4	6.1	0.9	0.4	3.0	2.3	2.9	2.0	0.2	6,269
Afr. urban	19.9	5.4	0.9	0.3	3.7	2.6	3.1	1.5	0.3	3,349
Afr. non urban	14.6	6.9	0.8	0.4	2.2	1.9	2.7	2.5	0.1	2,92
Coloured	22.3	5.4	1.4	1.9	5.8	7.3	5.0	3.3	0.7	806
White	21.4	5.1	1.4	7.6	4.8	23.4	9.1	1.3	4.0	767
Asian	23.7	5.4	1.0	3.9	11.5	3.8	6.2	0.3	0.7	300
Total	18.6	5.9	1.0	1.3	3.7	4.8	3.8	2.0	0.6	8,156

### C. Symptomatic Asthma and Chronic Bronchitis

The determination of the prevalence of these two conditions is based on the typical symptoms of asthma and chronic bronchitis and the data are shown in Table 18. Women more frequently than men and older persons rather than younger persons report symptoms of asthma and chronic bronchitis.

Surprisingly, the non-urban participants report these symptoms more frequently than their urban counterparts. In general the highest rates for asthma were reported in Northern Cape and KwaZulu-Natal Provinces, while for chronic bronchitis these two provinces along with Eastern Cape and Gauteng Provinces have the highest rates. For both conditions the Northern Province reported the lowest rates along with North West Province for chronic bronchitis in women. Low levels of education are strongly associated with high rates of both asthma and chronic bronchitis, but differences by ethnic group were reportedly small.

**Table 18 Prevalence of symptomatic asthma and chronic bronchitis**

Percentage of men and women age 15 and over who report various symptoms of asthma and chronic bronchitis, according to background characteristics, South Africa 1998

Background characteristic	Men			Women		
	Asthma <sup>1</sup>	Chronic bronchitis <sup>2</sup>	Number of men	Asthma	Chronic bronchitis	Number of women
<b>Age</b>						
15-24	3.1	0.9	1,816	5.6	1.9	2,084
25-34	4.6	1.7	1,123	6.4	1.4	1,721
35-44	7.3	2.4	1,005	8.3	2.5	1,460
45-54	11.1	4.8	701	10.3	3.7	1,116
55-64	12.2	3.6	518	12.7	4.1	914
65+	11.1	4.3	507	14.2	5.6	861
<b>Residence</b>						
Urban	5.8	2.2	3,569	8.0	2.2	4,999
Non-urban	8.1	2.6	2,102	9.5	3.7	3,157
<b>Province</b>						
Western Cape	4.4	2.3	721	7.1	3.0	799
Eastern Cape	6.9	3.0	758	8.0	4.9	1,161
Northern Cape	10.3	5.1	135	9.1	2.5	168
Free State	6.4	1.6	444	6.8	2.1	519
KwaZulu Natal	10.0	2.8	1,064	13.5	3.6	1,608
North West	4.7	1.9	551	7.4	0.9	647
Gauteng	7.3	2.4	1,099	8.3	2.4	1,887
Mpumalanga	5.4	1.3	377	7.1	1.6	507
Northern	3.8	1.3	521	5.4	1.5	859
<b>Education</b>						
No education	13.9	5.1	562	15.7	5.6	1,186
Sub A - Std 3	11.5	3.7	777	13.0	4.5	1,088
Std 4 - Std 5	7.5	2.8	755	7.7	2.3	1,136
Std 6 - Std 9	4.3	1.4	2,297	6.3	2.1	3,094
Std 10	5.3	1.6	801	6.2	1.0	1,120
Higher	2.1	1.1	440	4.6	0.9	495
<b>Population Group</b>						
African	6.4	2.1	4,257	8.5	2.8	6,269
Afr. urban	5.7	1.8	2,375	7.5	2.1	3,349
Afr. non-urban	7.4	2.4	1,882	9.7	3.6	2,921
Coloured	6.2	3.6	637	8.1	2.8	806
White	8.5	2.8	564	8.1	2.9	767
Asian	8.9	2.9	195	12.5	0.7	300
Total <sup>3</sup>	6.7	2.3	5,671	8.6	2.8	8,156

Note: <sup>1</sup>Asthma refers to respondents who report wheezing and shortness of breath in the year prior to the survey and who also have their sleep interrupted by coughing, wheezing or a tight chest. <sup>2</sup>Chronic bronchitis refers to those reporting a productive cough for at least 3 months a year during the two years prior to the survey. <sup>3</sup>Total includes a small number of men and women not stated as to education and ethnic group.

### D. Hypertension

Tables 19.1 and 19.2 show the prevalence of self-reported and measured hypertension as well as the treatment status that has been achieved in these patients. Eleven percent of men and 13 percent of women were found to either have a blood pressure above 160/95mmHg or were taking appropriate medication to lower their blood pressure. A calculation based on these prevalence rates and the census figures published for the South African population aged 15 years and older leads to an estimate of about 3.3 million hypertensive people in the country. As

expected, hypertension is more prevalent among older South Africans. The urban/non-urban differences were negligible, quite different from findings published 10 to 20 years ago which found that rural South Africans had much lower rates of hypertension than their urban counterparts. In this survey, the highest rates are found in the Free State and Northern Cape for men and the Northern Cape and North West Provinces for women. Mpumalanga and Northern Provinces had marked lower rates of hypertension than the other provinces. Although both tables show lower rates of hypertension in more educated people, this should be interpreted with care as the least educated sector of the South African population is also the oldest sector. For men, the highest rates are found in the white group, followed by the coloured and then the African and Asian groups, while for women, the highest rates are found in the coloured group, followed by the African, white and Asian groups.

Overall, fewer hypertensive men (9 percent) than women (23 percent) are aware of their condition. Similarly, fewer hypertensive men in non-urban areas know that they suffer from the condition than their urban counterparts. This highlights non-urban hypertensive males as the group with the most undiagnosed hypertension in the country and who need to be targeted to improve the diagnosis rate. This poor level of diagnoses in men is reflected in the low rates of men (11 percent compared to 28 percent of women) who take appropriate drugs for hypertension. Consequently, only 9 percent of all men with hypertension had controlled blood pressure (BP<160/95 mmHg), compared to 23 percent of hypertensive women. This is still a very low level of control and highlights the need to improve hypertension control in the country if premature death and disability are to be prevented.

A more disturbing finding is that the control of hypertension in young patients is far worse than that achieved in older hypertensive patients. These are the hypertensive patients who require good control even more than older patients to prevent end organ damage while they are still part of the labour force of the country. For men, the worst level of control was reported in the African group, while for women it was found in non-urban African women.

## **E. Body Mass Index**

The body mass index (weight in kilograms divided by the square of height in metres) of South African men and women are shown in Tables 20.1 and Table 20.2. More than half the men are normal weight, with thirteen percent being underweight. The highest rates of underweight occur in men aged 15-24 years and men living in Northern Cape, Northern, and Free State Provinces. Men who have completed their schooling have lower rates of underweight, while Asian and non-urban African men have the highest rates. For women, only 37 percent are normal weight, while about 6 percent are underweight. Again, this is mostly in women aged 15-24 years, Asian women and women living in the Northern Cape.

**Table 19.1 Hypertension prevalence and treatment status--men**

Percentage of men age 15 and over who report having hypertension, percentage who are measured as being hypertensive and of those, the percentage who know that they are hypertensive, are taking appropriate medications, and have controlled blood pressure, according to background characteristics, South Africa 1998

Background characteristic	Reported hypertension	Measured hypertension	No. adults	Among those with hypertension			
				Percent who know	Take medication	Have Controlled BP	No. with hypertension
<b>Age</b>							
15-24	0.2	2.7	1,816	(0.0)	(0.0)	(8.8)	48
25-34	2.7	5.1	1,123	10.5	1.8	4.9	57
35-44	7.5	12.2	1,005	19.8	3.4	5.7	123
45-54	18.0	19.7	701	36.9	11.6	8.8	138
55-64	16.9	22.2	518	34.9	15.5	6.6	115
65+	25.0	28.5	507	40.1	19.2	14.3	145
<b>Residence</b>							
Urban	9.3	11.5	3,569	32.8	12.6	8.9	409
Non-urban	5.5	10.3	2,102	20.7	7.1	8.3	216
<b>Province</b>							
Western Cape	9.2	10.9	721	30.1	14.9	11.2	79
Eastern Cape	9.0	12.5	758	34.4	9.4	10.3	95
Northern Cape	13.2	14.2	135	39.1	21.5	12.6	19
Free State	7.2	14.5	444	22.3	7.5	6.1	64
KwaZulu Natal	7.5	11.1	1,064	26.7	11.2	8.6	118
North West	4.8	11.8	551	14.9	7.6	8.9	65
Gauteng	10.7	11.7	1,099	38.7	12.3	6.2	129
Mpumalanga	4.9	6.2	377	(23.2)	(13.4)	(13.4)	23
Northern	4.4	6.4	521	(13.5)	(0.0)	(7.0)	33
<b>Education</b>							
No education	11.6	19.3	562	29.7	14.5	10.7	108
Sub A - Std 3	7.2	13.8	777	25.4	12.8	11.9	107
Std 4 - Std 5	7.0	8.0	755	20.4	10.8	9.7	61
Std 6 - Std 9	6.4	9.8	2,297	26.7	7.3	4.9	224
Std 10	8.7	9.9	801	33.8	9.8	9.3	79
Higher	10.9	8.4	440	(43.7)	(16.1)	(15.7)	37
<b>Population Group</b>							
African	5.8	10.3	4,257	23.3	9.1	7.9	438
Afr. urban	6.9	11.2	2,375	27.1	10.7	7.6	265
Afr. non-urban	4.4	9.2	1,882	17.5	6.6	8.3	173
Coloured	9.0	12.4	637	33.7	15.0	12.1	79
White	21.1	15.2	564	47.7	15.2	10.8	86
Asian	11.9	9.9	195	(41.5)	(10.4)	(5.2)	19
<b>Total</b>	<b>7.9</b>	<b>11.0</b>	<b>5,671</b>	<b>28.6</b>	<b>10.7</b>	<b>8.7</b>	<b>625</b>

Note: Measured hypertension refers to those with blood pressures greater than or equal to 160/95 mm Hg and those who are taking hypertension medication. Controlled blood pressure refers to those with blood pressures less than 160/95 mm Hg. Numbers in parentheses indicate a figure based on 25-49 unweighted cases.

**Table 19.2 Hypertension prevalence and treatment status women**

Percentage of women age 15 and over who report having hypertension, percentage who are measured as being hypertensive and of those, the percentage who know that they are hypertensive, are taking appropriate medications, and have controlled blood pressure, according to background characteristics, South Africa 1998

Background characteristic	Reported hypertension	Measured hypertension	No. adults	Among those with hypertension			
				Percent who know	Take medication	Have Controlled BP	No. with hypertension
<b>Age</b>							
15-24	3.8	1.9	2,084	(6.7)	(0.0)	(6.4)	39
25-34	8.0	4.8	1,721	46.8	12.8	13.3	82
35-44	15.1	11.5	1,460	46.5	20.8	20.6	168
45-54	30.5	20.3	1,116	61.0	29.9	26.8	226
55-64	40.9	29.1	914	65.6	33.2	25.0	266
65+	42.2	34.3	861	60.3	32.9	24.4	295
<b>Residence</b>							
Urban	20.6	13.6	4,999	62.8	31.6	25.7	682
Non-urban	15.4	12.5	3,157	45.9	21.1	18.3	395
<b>Province</b>							
Western Cape	19.3	14.2	799	65.7	39.0	36.8	114
Eastern Cape	18.9	14.2	1,161	57.3	25.5	20.6	165
Northern Cape	22.8	17.0	168	64.8	35.3	26.2	29
Free State	20.4	15.5	519	61.7	32.9	25.0	80
KwaZulu Natal	20.7	14.7	1,608	55.7	24.0	16.7	237
North West	14.9	16.2	647	36.4	15.0	15.1	105
Gauteng	21.7	13.1	1,887	64.9	31.9	26.6	247
Mpumalanga	16.7	8.5	507	53.0	31.3	20.6	43
Northern	8.7	6.6	859	32.6	18.3	24.4	57
<b>Education</b>							
No education	27.0	22.8	1,186	53.5	26.2	19.9	271
Sub A - Std 3	25.6	19.7	1,088	59.5	31.0	25.1	214
Std 4 - Std 5	22.5	16.0	1,136	61.4	27.3	24.0	181
Std 6 - Std 9	15.6	10.3	3,094	58.1	31.4	27.2	320
Std 10	10.1	5.5	1,120	38.7	8.6	9.1	62
Higher	11.7	4.5	495	(64.1)	(26.1)	(13.0)	22
<b>Population Group</b>							
African	17.4	13.0	6,269	54.2	26.2	21.7	815
Afr. urban	19.9	14.0	3,349	61.4	30.4	24.4	467
Afr. non-urban	14.6	11.9	2,921	44.5	20.5	18.1	347
Coloured	22.3	17.1	806	62.2	34.2	29.9	138
White	21.4	12.0	767	65.3	34.6	27.5	92
Asian	23.7	9.3	300	(70.5)	(21.5)	(14.3)	28
<b>Total</b>	<b>18.6</b>	<b>13.2</b>	<b>8,156</b>	<b>56.6</b>	<b>27.7</b>	<b>23.0</b>	<b>1,076</b>

Note: Measured hypertension refers to those with blood pressures greater than or equal to 160/95 mm Hg and those who are taking hypertension medication. Controlled blood pressure refers to those with blood pressures less than 160/95 mm Hg. Numbers in parentheses indicate a figure based on 25-49 unweighted cases.

Approximately 28 percent of men and 55 percent of women are overweight or obese. In men, overweight and obesity occur more frequently in the urban setting than in the non-urban setting and most frequently in the Western Cape, Gauteng, Eastern Cape and KwaZulu-Natal. White men and the most educated men are the most overweight or obese of all men. For women, the overweight patterns do not differ much between urban and non-urban women, although urban women tend to be more obese. In Gauteng and KwaZulu-Natal, more than one-third of the women are obese, while Northern and North West Provinces have the lowest level of obesity. Women with the lowest level of education seem to be the most obese, although this might again be a function of age. The African urban women have the highest rate of obesity, while Asian women have the lowest rate. Obesity has been found in a number of studies in all ethnic groups to predict the development of hypertension and diabetes, conditions that contribute heavily to morbidity in adults. These findings suggest that the control of obesity should be a focus of community-based intervention programmes in South Africa.

**Table 20.1 Body weight men**

Percent distribution of men age 15 and above by body mass index categories, according to background characteristics, South Africa, 1998

Background characteristic	Under-weight < 18.5	Normal 18.5- 24.9	Over-weight 25-29.9	Obese 30+	Missing	Total	Number
<b>Age</b>							
15-24	21.1	66.7	8.3	2.7	1.2	100.0	1,816
25-34	8.4	61.7	20.4	7.6	1.9	100.0	1,123
35-44	8.4	52.0	24.5	12.6	2.5	100.0	1,005
45-54	8.9	43.8	27.2	16.7	3.5	100.0	701
55-64	9.0	46.7	27.9	14.2	2.3	100.0	518
65+	9.4	45.4	27.1	13.2	4.9	100.0	507
<b>Residence</b>							
Urban	10.6	54.2	21.7	10.9	2.7	100.0	3,569
Non-urban	16.2	60.5	15.4	6.2	1.7	100.0	2,102
<b>Province</b>							
Western Cape	5.7	54.1	24.8	12.8	2.6	100.0	721
Eastern Cape	11.4	57.0	20.3	9.9	1.5	100.0	758
Northern Cape	22.7	53.3	14.2	7.5	2.3	100.0	135
Free State	18.6	56.1	16.2	8.0	1.1	100.0	444
KwaZulu Natal	10.9	55.9	21.1	10.2	1.9	100.0	1,064
North West	17.3	60.6	15.2	5.4	1.6	100.0	551
Gauteng	9.3	56.4	20.4	9.8	4.0	100.0	1,099
Mpumalanga	16.4	57.4	16.1	7.2	3.0	100.0	377
Northern	19.4	57.1	15.8	6.1	1.5	100.0	521
<b>Education</b>							
No education	11.9	56.9	20.8	8.0	2.4	100.0	562
Sub A - Std 3	14.3	57.0	18.0	8.0	2.6	100.0	777
Std 4 - Std 5	15.7	57.8	17.3	7.3	1.9	100.0	755
Std 6 - Std 9	14.7	58.8	16.9	7.5	2.2	100.0	2,297
Std 10	5.6	57.5	21.7	13.1	2.1	100.0	801
Higher	6.9	40.7	32.7	17.3	2.3	100.0	440
<b>Population Group</b>							
African	13.7	59.9	16.9	7.7	1.8	100.0	4,257
Afr. urban	11.6	58.3	18.4	9.4	2.3	100.0	2,375
Afr. non-urban	16.5	61.9	14.9	5.4	1.3	100.0	1,882
Coloured	11.2	55.7	21.8	9.1	2.1	100.0	637
White	4.5	36.5	34.3	19.8	5.0	100.0	564
Asian	16.1	49.0	22.9	8.7	3.3	100.0	195
Total	12.6	56.5	19.4	9.1	2.3	100.0	5,671

Note: Total includes 40 men not stated as to education and 18 men not stated as to ethnic group

**Table 20.2 Body weight women**

Percent distribution of women age 15 and above by body mass index categories, according to background characteristics, South Africa, 1998

Background characteristic	Under-weight <18.5	Normal 18.5-24.9	Over-weight 25-29.9	Obese 30+	Missing	Total	Number
<b>Age</b>							
15-24	9.3	59.5	19.6	9.4	2.1	100.0	2,084
25-34	4.9	37.4	28.5	26.3	2.8	100.0	1,721
35-44	2.7	26.7	30.2	38.7	1.7	100.0	1,460
45-54	3.6	23.3	25.8	44.3	3.0	100.0	1,116
55-64	2.7	25.1	25.1	45.1	2.1	100.0	914
65+	7.1	31.3	25.5	32.0	4.0	100.0	861
<b>Residence</b>							
Urban	4.9	34.8	25.4	32.4	2.4	100.0	4,999
Non-urban	6.3	40.9	25.6	24.5	2.6	100.0	3,157
<b>Province</b>							
Western Cape	4.8	37.3	25.6	30.8	1.5	100.0	799
Eastern Cape	5.7	37.7	25.0	28.9	2.7	100.0	1,161
Northern Cape	12.3	37.0	24.5	24.5	1.7	100.0	168
Free State	6.9	37.7	25.8	29.1	0.5	100.0	519
KwaZulu Natal	5.2	30.1	26.5	34.2	3.9	100.0	1,608
North West	8.1	46.5	25.6	18.8	1.1	100.0	647
Gauteng	3.3	33.4	26.0	34.7	2.5	100.0	1,887
Mpumalanga	4.8	43.2	24.6	25.4	2.0	100.0	507
Northern	7.0	47.0	23.2	19.4	3.4	100.0	859
<b>Education</b>							
No education	5.7	33.8	26.7	32.0	1.7	100.0	1,186
Sub A - Std 3	6.2	31.3	24.4	34.9	3.1	100.0	1,088
Std 4 - Std 5	4.6	32.4	27.2	32.3	3.5	100.0	1,136
Std 6 - Std 9	5.5	40.5	23.8	28.2	2.1	100.0	3,094
Std 10	6.1	38.0	29.4	24.2	2.3	100.0	1,120
Higher	3.9	47.3	22.5	22.4	3.8	100.0	495
<b>Population Group</b>							
African	4.8	37.0	25.4	30.5	2.3	100.0	6,269
Afr. urban	3.9	33.5	25.1	35.7	1.9	100.0	3,349
Afr. non-urban	5.9	41.0	25.8	24.6	2.7	100.0	2,921
Coloured	9.8	35.9	25.1	28.3	1.0	100.0	806
White	2.8	42.1	26.1	24.3	4.7	100.0	767
Asian	14.7	34.0	25.9	20.2	5.2	100.0	300
Total	5.5	37.2	25.5	29.4	2.5	100.0	8,156

Note: total includes 37 women not stated as to education and 14 not stated as to ethnic group.

## F. Work-Related Illness and Injury

The proportion of working respondents who reported suffering from a work-related illness or injury is shown in Table 21. From the results in Table 2 and Table 21, it is calculated that 45 percent of men and 29 percent of women in the survey worked for payment during the previous year. These rates are much lower than those reported in the census of 1996 and suggest a biased sample of workers who could be traced at their homes and an under-representation of healthy workers who were at their places of employment. Of the workers who participated in the study, 9 percent of men and 5 percent of women reported that they suffered from a work-related illness or injury during the previous year. These are remarkably high figures and may in part be due to the above mentioned bias. The injuries and illnesses occurred more frequently among people resident in non-urban areas than urban areas. For men, work related illness and injury occurred more frequently in the least educated groups who probably were more involved in manual labour, compared to the better educated men. Men from non-urban African and coloured groups reported the highest rates.

Table 21 Prevalence of work-related illness and injury

Among working men and women age 15 and above, the prevalence of injury or work-related health problem in the 12 months preceding the survey, according to background characteristics, South Africa 1998

Background characteristic	Male		Female		Total	
	Percent injured	No. of working adults	Percent injured	No. of working adults	Percent injured	No. of working adults
<b>Age</b>						
15-24	8.7	422	5.1	354	7.1	776
25-34	10.3	686	4.9	668	7.6	1,354
35-44	8.4	690	2.9	700	5.6	1,390
45-54	10.9	462	8.5	421	9.7	883
55-64	8.9	223	6.7	193	7.9	416
65+	5.1	64	5.9	35	5.4	99
<b>Residence</b>						
Urban	7.6	1,780	4.8	1,776	6.2	3,557
Non-urban	13.4	766	6.1	594	10.2	1,361
<b>Province</b>						
Western Cape	9.9	439	6.3	381	8.2	820
Eastern Cape	8.1	241	4.2	208	6.3	449
Northern Cape	10.0	71	3.6	47	7.4	118
Free State	7.3	206	2.7	181	5.1	387
KwaZulu Natal	11.7	486	5.8	403	9.0	890
North West	3.7	254	1.6	185	2.8	439
Gauteng	10.8	507	6.0	698	8.0	1,205
Mpumalanga	7.4	193	6.6	121	7.1	314
Northern	12.3	150	4.0	145	8.2	295
<b>Education</b>						
No education	14.0	198	4.4	191	9.3	389
Sub A - Std 3	10.8	328	5.3	257	8.4	586
Std 4 - Std 5	12.6	294	6.7	296	9.6	590
Std 6 - Std 9	9.6	914	5.0	794	7.4	1,708
Std 10	7.4	479	4.5	537	5.9	1,016
Higher	4.0	319	5.4	276	4.6	595
<b>Population Group</b>						
African	8.7	1,627	4.3	1,498	6.6	3,125
Afr. urban	6.7	1,003	3.5	1,015	5.1	2,018
Afr. non-urban	11.8	624	6.0	483	9.3	1,107
Coloured	11.9	381	5.2	362	8.6	742
White	9.8	399	8.1	398	8.9	797
Asian	9.5	138	2.0	102	6.3	240
Total	9.4	2,547	5.1	2,371	7.3	4,918

Total includes cases not stated as to education and ethnic group

## VI. CONCLUSIONS

The survey found an infant mortality rate of 45 deaths per 1000 live births for the period roughly from 1993 to 1997. The findings on infant mortality demonstrate that where socio-economic conditions are poorer, infant mortality is higher. As expected, infant mortality has begun to increase with the impact of the HIV/AIDS epidemic. Government initiatives on poverty alleviation and the focus on HIV/AIDS are timely interventions to improve the health status of all South Africans.

Clearly people have heard about HIV/AIDS in South Africa. However, this does not always translate into safe sexual behaviour as seen from the high rates of STD symptoms. Twelve percent of men interviewed reported having symptoms of an STD in the three months prior to the survey. The patterns suggest that the problem with STD infections is more major in certain communities; for example, the rate is 17 percent in non-urban areas. These findings support the need for greater partnerships and a strengthening of the government drive to prevent the further spread of HIV/AIDS.

Survey results suggest that fertility rates have been declining and that the total fertility rate is 2.9 children per woman for the period 1993-97. Even the provinces which previously had high fertility rates have experienced reductions such that the total fertility rate is now below 4 children per woman. This is consistent with increasing access to education (only 7 percent of women of reproductive age have no education) and an increase in contraceptive use.

There was almost universal knowledge of modern contraception among women interviewed and a relatively high use of modern contraception. But given the types of contraceptives most popular among women – injection, pills and female sterilisation – there is a clear need to promote the use of family planning methods which also encourage disease prevention, especially transmission of STDs and HIV.

Survey results show evidence of abuse against women. One in eight women reported that they had at some point been beaten by a partner. Data from other studies suggests that this may be an under-estimate of the true level, due to the sensitivity of the questions on this topic.

The survey reveals generally high levels of use of primary health care for women and children. For example, women receive antenatal care from a nurse or doctor for 94 percent of births. Most of the visits were to a nurse. Only 15 percent of births in the five years preceding the survey were delivered without medical assistance from either a nurse/midwife or doctor. Three-quarters of mothers of children under age five could produce a road-to-health card on request.

Of concern however, is the finding that the maternal mortality ratio remains high at 150 per 100,000 live births. It is hoped that the Confidential Enquiry into the Causes of Maternal Deaths in South Africa instituted by the Minister of Health in 1997 will provide more information on the factors which are still contributing to this high ratio and that the mechanisms to improve quality of care built into the confidential enquiry will contribute to a reduction in maternal mortality.

The age pattern of early childhood diarrhoeal disease observed in this survey is believed to be associated with increased exposure to the illness as a result of weaning, greater mobility of the child, as well as to the immature immune system of children age 6-23 months. Although strategies are in place to encourage women to give oral rehydration solutions to children with diarrhoea, the survey suggests a clear need to intensify health promotion campaigns in this area. Only 58 percent of the children who were reported to have had diarrhoea in the two weeks prior to the survey were given oral rehydration therapy and this was mostly commercial solutions.

The findings on immunisation coverage show that 63% of children aged 12-23 months were fully vaccinated against the major childhood diseases. The narrowing of the gap in coverage between the urban and non-urban areas is an important indicator of the success of the government's initiatives in primary health care. However, the study shows a relatively high dropout rate between the first and third doses of DPT and polio vaccines, indicating a need to increase campaigns to encourage mothers to complete the full course of basic immunisations for their children. It is important to understand the factors which impede full vaccination in order to further enrich

information and communication mechanisms.

Findings on breastfeeding are a cause for concern. Exclusive breast-feeding was found to be very low, even in the first 3 months of life, when only 10 percent of infants are given nothing but breast milk. While the policy on breastfeeding remains complex in the light of potential transmission of HIV/AIDS, this survey has highlighted the importance of providing mothers with information about benefits and risks of breastfeeding and the need for enabling environments to be created in support of breastfeeding.

The survey reveals variations in the levels of lung disease and hypertension among adults across the country. Seven percent of men and 9 percent of women age 15 and over report that they have symptoms of asthma, while 2 percent of men and 3 percent of women report having chronic bronchitis. Estimates imply that some 3.3 million adults in South Africa are hypertensive (11 percent of men and 13 percent of women) and that less than half of them are aware of it. Moreover, few hypertensives have their blood pressure under control - only 9 percent of men and 23 percent of women with hypertension. Hypertensive African men, especially those in non-urban areas, are seldom diagnosed, which points to a need to increase screening when they visit health services. The treatment status of hypertensives in South Africa suggests the need for improvement in the quality of care provided for adults with chronic conditions in South Africa. The overall pattern of conditions found in adults of 15 years and older shows a portion of the adult population that is directly affected by the health transition.

The lifestyle indicators that have been identified in this report suggest that, for men, the high rate of smoking needs intervention and for women, the high rates of overweight and obesity as well as high rates of smoking among coloured women are the primary areas of concern. The apparent drop in smoking rates are an important indication that the Department of Health's focussed strategies to reduce cigarette smoking are having an effect.

A major focus of government is the elimination of poverty and removing the inequalities in society. Although this preliminary report has not primarily focussed on issues pertaining to equity, it is clear that there are still large differences in health status between provinces, urban and non-urban areas, and population groups. These issues as well as more detailed analyses of disease trends remain to be explored more extensively in the final report.

This survey was undertaken as part of the Department of Health's drive to provide essential information in the context of its National Health Information System.

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