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## Acronym List

HPV	Human Papilloma Virus
MRC	Medical Research Council
NCD	Non-Communicable Disease
NDoH	National Department of Health
NSP	National Strategic Plan
SADHS	South African Demographic and Health Survey
SANAC	South African National AIDS Council
WHO	World Health Organisation

## Foreword by the Minister



Non-communicable diseases are predicted to increase at an unprecedented rate over the next two decades and I am fully aware that without strong and innovative interventions now, we will not only subvert government's goal of a long and health life for all, but our health services could in the future become overwhelmed with patients requiring acute as well as long term health care. This

Strategic Plan (2013-17) flows

directly from targets set at the South African Summit on the Prevention and Control of Non-communicable diseases held in September 2011. This summit, attended by major stakeholders including users and survivors, government departments, non-governmental organisations, academics and other experts in non-communicable diseases concluded with the unanimous adoption of the South African Declaration On The Prevention And Control Of Non-Communicable Diseases (included as an Appendix to this strategy), and within this, ten clear targets to be reached by the year 2020.

The importance of this Declaration and the commitment of all stakeholders to collaborate to reduce Non-communicable disease incidence and improve care, treatment and support should not be underestimated. While the targets that have been set may look somewhat ambitious, if all role-players stand together, work together and commit renewed energy to prevention and control of non-communicable diseases, we can meet these targets and thereby make a significant contribution to well-being and development.

When I gave South Africa's commitment to fighting non-communicable diseases at the United Nations General Assembly in September 2011, I did not do this lightly. I supported the Political Declaration with the knowledge of a growing disease burden from non-communicable diseases in South Africa and in Africa as a whole and with an understanding of the impacts not only on health but the future of South Africa more broadly. I said at the UN High

Level meeting that "South Africa recognises the need for non-communicable diseases to be regarded as a development priority rather than only a health concern. It is the view of the South African government that a 'health only approach' will not reverse the global mortality and burden from non-communicable diseases, but that a 'whole of government' and 'whole of society' approach is needed". The need to prevent and manage non-communicable diseases is also an important emphasis in the National Development Plan drafted by the National Planning Commission and accepted as the long term guidance document for South Africa.

Readers will note that the first two objectives of this Strategy are to (1) Establish a functioning structure for planning and monitoring cross and intersectoral interventions to reduce NCDs and (2) Develop an integrated and intersectoral plan for a co-ordinated response to prevention of NCDs. These are not objectives that can wait.

While we emphasise prevention and promotion we must not neglect care and treatment and health systems changes to improve health outcomes. Too few people needing interventions receive care and the quality of interventions needs substantial improvement. We also cannot afford to see and treat different chronic conditions in isolation, including chronic communicable diseases, and health systems reform is critical in this regard.

Finally we must improve our information about non-communicable diseases and their main risk factors. It is very hard to do good planning and evaluation with our current data. We need to get proper baselines and from this measure our successes. I am confident that we will indeed be successful in combating non-communicable diseases guided by this five year strategy.

A handwritten signature in black ink, appearing to read 'Dr PA Motsoaledi'.

**Dr PA Motsoaledi (MP)**  
**Minister of Health**

## Statement of the Deputy Minister



This Strategic Plan will assist our country to minimise the burden of disease resulting from Non Communicable Diseases (NCD's) and in particular those that are related to the four lifestyle risk factors of eating unhealthy foods, using tobacco, consuming alcohol, and inactivity.

Several Global studies on NCDs have identified six major strategic

areas that would help to promote wellbeing, improve health outcomes and reduce barriers to health promotion; namely 1) raising public awareness, 2) enhancing economic, legal and environmental policies, 3) modifying risk factors, 4) engaging business and community, 5) mitigating health impacts of poverty and urbanisation, and 6) reorientation health systems.

These strategic areas aim to achieve public health goals and clearly require strategic leadership and a broad based multi-sectoral approach in order to make significant advances for the wellbeing of society beyond a narrow medical clinical approach where in most cases affected individual patients present themselves when the disease is at an advanced stage and the environment they live in is not enabling to tackling risk factors.

This Strategic Plan advocates for an integrated approach and effort of "social engineering" and biomedical and behavioural interventions implemented through governments, civil society and other stakeholders, as categorically stated in this strategy.

Our Declaration for Prevention and Control of Non-communicable Diseases commits to a set of 10 goals and targets to be achieved by 2020 and 2030 which covers reducing the relative premature mortality; reducing tobacco use; reducing the per capita consumption of alcohol; reducing mean population intake of salt ; reducing the prevalence of people with raised blood pressure; increasing the prevalence

of physical activity; reducing the prevalence of cervical cancer; increasing the percentage of people controlled for hypertension, diabetes and asthma and increasing the number of people screened and treated for mental disorder.

As we encourage more investment in innovation, scientific enquiry, health systems reforms and legislative interventions our message is that healthy lifestyle is the key to the prevention of approximately 80% of NCDs. All our efforts are important to avert yet another devastating epidemic on our families, our society and our economy. We must work together to achieve the goals of our common Declaration on combating NCD's.

A handwritten signature in black ink, appearing to read 'Dr GM Ramokgopa', written over a horizontal line.

**Dr GM Ramokgopa**  
**Deputy Minister of Health**

## Acknowledgements



This Strategic Plan is the culmination of the work and ideas of many people working in diverse areas over a number of years, to deliver on a multi-sectoral approach, premised on effective collaboration, equitable funding, service equity, good management and the availability of an appropriately skilled workforce.

At a Summit hosted by the Honourable Minister of Health, Dr A Motsoaledi and the Deputy Minister of Health Dr G Ramokgopa in September 2011, these ideas were presented and robustly discussed over two days by users and survivors, government representatives, non-profit organisations, academics and other experts. Targets and objectives were agreed to and broad directions of what was required to get there were outlined.

A broad multi-sectoral approach is key to turning these ideas into actions that will enable the strategy to be successfully implemented and sustained. A phased approach, linking identified performance factors with strategic initiatives, as detailed on page 36, is equally important to effectively address the primary causes of mortality and morbidity or the broad “social determinants” of NCDs; such as preventing the specific behavioural risk factors and ensuring that the health system is geared to undertake early detection, cost-effective and appropriate treatment and control.

Real leadership is going to be a catalyst for delivering on this intent, to bring meaning and to make sense of the targets and demand for results over the coming years, and I am confident that the team that is responsible for putting together this document and who will lead this drive to promote health and wellness among our people, is equal to the task.

The National Department of Health wishes to thank all of the people who took part in our consultation and offered us their insights, evidence, experience and ideas. Without those

contributions we simply would not have been able to develop such a plan that represents the interests and concerns of the full diversity of our country.

I would like to thank the following people who prepared background papers for the commissions and made presentations informing the debates at the summit. Large parts of this plan have been taken directly from these papers and from the discussions that followed: Dr Shaidah Asmal, Prof Debbie Bradshaw, Prof Melvyn Freeman, Dr Andre Kengne, Dr Vash Mungal-Singh, Ms Sandhya Singh, Prof Krisela Steyn, and Prof Edelweiss Wentzel Viljoen.

Provincial Departments of Health through both the non-communicable diseases co-ordinators and Heads of Departments are thanked for playing an important role in providing input (but also caution for what is feasible and practically realistic) into this strategic plan. Officials within the National Department of Health who structured and collated the plan as well as those that assisted with editing, lay-out and design are thanked for their efforts. These include the head of non-communicable diseases Prof Melvyn Freeman, Director of Chronic Diseases, Disabilities and Geriatrics Ms Sandhya Singh, head of communications and stakeholder management Mr Popo Maja, head of content and development Ms Ria Grobler and graphic designer Mr Zamokuhle Mthethwa.

This bears true testimony to a fact that the hard work of delivering this strategy can only succeed with the involvement of the widest possible coalition.

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**M P Matsoso**  
**Director-General Health**

## Executive summary

Non-communicable diseases (NCDs) are the leading causes of mortality globally, causing more deaths than all other causes combined, and they strike hardest at the world's low- and middle-income populations.

While in South Africa the HIV and AIDS and TB epidemic still predominate in terms of both morbidity and mortality, with the rise in urbanisation, industrialisation and economic transition and health services that are not always adequately equipped to deal with the issues, many more people are becoming ill and dying from NCDs.

The NCD epidemic can be prevented through reduction of the underlying risk factors, early detection and timely treatments.

In 2011 there was extensive global focus on NCDs culminating in the United Nations General Assembly High Level Meeting of Heads of State and Governments and the adoption of the Political Declaration on the Prevention and Control of NCDs. Perhaps most importantly the UN declared that NCDs were not only a Health but a Development concern requiring a whole of government and whole of society approach.

Leading up to this High level meeting a national summit was hosted by the South African Minister and Deputy-Minister of Health and was attended by government, non-governmental organisations (including user groups), professional organisations and academics.

The summit adopted a Declaration and set 10 targets to be reached by 2020. This Strategy is largely the arrangement to reach these targets.

Non-communicable Diseases, which for the purposes of this document include Cardiovascular diseases, Diabetes, Chronic respiratory conditions, Cancer, Mental disorder, Oral diseases, Eye disease, Kidney disease and Muscular-skeletal conditions, are largely preventable through attention to four major risk factors. These are Tobacco use; Physical inactivity; Unhealthy diets; Harmful use of Alcohol.

The attainment of the overall health sector goal of “a long and healthy life for all” through prevention and control of non-communicable diseases requires implementation of three major components:

- 1) Prevention of NCDs and promotion of health and wellness at population, community and individual levels.
- 2) Improved control of NCDs through health systems strengthening and reform
- 3) Monitoring NCDs and their main risk factors and conducting innovative research.

Effective prevention necessitates a broad multi-sectoral approach involving different government departments, civil society organisations, the private sector, media as well as commitment to health and wellness from individuals themselves. The health, life opportunities and the quality of life of a population requires a shift away from government departments working in isolation. Key sectors such as Agriculture, Trade and Industry, Social Development, Sport and Recreation, Basic and Higher Education, Transport and Science and Technology and others must recognise their role in working toward a healthy population. There are also important roles for non-governmental organisations and the private sector in reducing NCDs.

Identifying individuals at risk and assisting them to change their behaviour is an important strategy to prevent NCDs. Moreover early identification through screening programmes, such as inclusion of NCDs in the HIV Counselling and Testing (HCT) and testing patients when attending clinics for other reasons offer important opportunities for preventing NCD morbidity and mortality.

Changed lifestyles for people already diagnosed with NCDs as well as strict adherence to medical interventions are important for secondary prevention of NCDs and increasing life expectancy. Health workers, family members and support group members can all play a critical role in assisting people already living with chronic diseases to remain healthy.

Community level workers with competencies in palliative care in the home enhance the preventative messages for people living with chronic diseases and for their family members.

Health system strengthening is essential to prevent and control NCDs. Health care for NCD requires a different approach than for acute diseases. The patients with NCDs will require lifelong care which necessitates a patient centred health service which supports the patients' optimal adherence to treatment.

Careful liaison and interaction between different levels of health care i.e. primary, secondary, and tertiary levels and with central and specialised hospitals is needed; including appropriate promotive, preventative, curative and palliative services at all levels. Community based services need to be integrated into the district health system and referral and back referral systems must be effective and efficient. All the main building blocks for health systems must be in place.

A comprehensive surveillance and monitoring system for NCDs is essential. It must include monitoring the exposures that lead to NCDs (unhealthy lifestyles and risk factors including among young people), monitoring health outcomes (illness and cause specific mortality) as well as the health system response (capacity, access to interventions and quality of interventions). At a minimum surveillance information must be instituted to establish baselines and monitor progress with respect to the targets set in the South African Declaration on the Prevention and Control of NCDs.

Research to understand and influence the macroeconomic and social determinants of NCDs and exposure to NCD risk factors; promotion of healthy lifestyles; cost-effectiveness and "best buys" research and innovative research to develop for example low-cost screening and intervention approaches as well as medicines and vaccines is needed.

A detailed plan for achieving the targets set at the South African Summit on Prevention and Control of NCDs with objectives, indicators, activities and time frames is set out.



# CHAPTER 1: INTRODUCTION



## Chapter 1: Introduction

One of the central priorities of government is “A long and healthy life for all”. To achieve this objective clear strategies and plans are needed to address each of the four areas that constitute South Africa’s quadruple burden of diseases - that is a maturing and generalised HIV and AIDS epidemic and high levels of tuberculosis; high maternal and child mortality; violence and injuries and non-communicable diseases.

This document establishes the framework for reducing morbidity and mortality from non-communicable diseases (NCDs) in the context of broad health reform in South Africa as well as a “whole of government” and “whole of society” approach to promoting health.

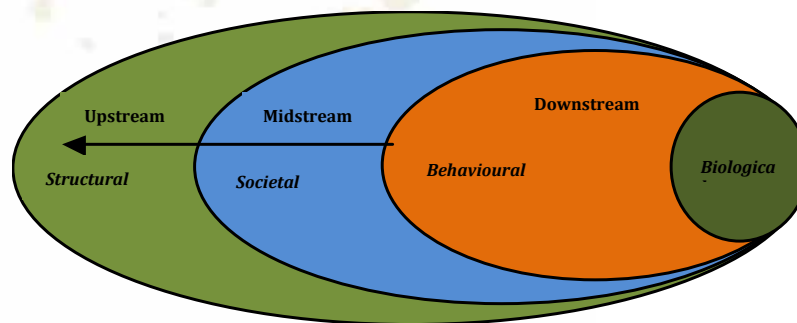
Reducing mortality from NCDs is critical to increasing life expectancy- which is one of the four outputs of the Negotiated Service Delivery Agreement signed between the Minister of Health and the President as the health sector’s contribution to a “healthy life for all”.

In addition, reducing non-communicable diseases and the main behavioural risk factors for NCDs will increase population “wellness” or wellbeing which is important to economic and social development.

When people are physically and mentally healthy, they produce more; they learn better; they incur less health care related costs (to themselves and to government); and communities, families and individuals thrive.

Interventions to reduce and manage the burden of disease can be grouped into 3 categories based on the nature of risks i.e. “downstream” interventions which are largely biological and target the individual, “midstream” which target groups of people such as institutions or communities and “upstream” interventions which focus on society as a whole (see Figure 1).

While the Health sector may need to focus on the downstream issues it is critical that they also work with other sectors on the midstream and upstream interventions.



**Figure 1 Levels of intervention**

This strategy emphasises the importance of the involvement of a number of different sectors to reducing non-communicable diseases but simultaneously argues that investment in combating NCDs is a boost to broader national development.

### 1.1 Recent prioritisation of NCDs

The year 2011 was a watershed one for NCDs with numerous initiatives launched both nationally and internationally to recognise and prioritise NCDs.

#### 1.1.1 South African Summit and NCD Declaration

In September 2011, the Minister and Deputy-Minister of Health hosted a summit on the Prevention and Control of Non-Communicable Diseases attended by participants representing government, non-governmental organisations (including user groups), professional organisations and academics.

The summit accepted key principles for reducing NCDs in South Africa through a Declaration adopted by all present and through setting ten targets to be reached 2020 (See Appendix 1). This Strategic Plan provides the direction for achieving these targets.

## 1.2 International prioritisation

Since 2000, the World Health Assembly has adopted a number of important resolutions on the prevention and control of Non-Communicable Diseases<sup>1</sup>.

These resolutions have called for greater prioritisation of NCD prevention and control, increased political leadership, intersectoral collaboration, greater sharing of evidence and best practice and improved screening and clinical practice. Resolutions on preventing the specific risk factors for NCDs have also been adopted<sup>2</sup>.

In April 2011, African Health Ministers met and adopted the Brazzaville Declaration on Non-communicable Disease Prevention and Control in the WHO African region<sup>1</sup>. In this declaration countries committed to develop integrated national action plans and to strengthen institutional capacities for NCD prevention and control.

Also in April 2011 the First Global Ministerial Conference on Healthy Lifestyles and Non-communicable Disease Control was held in Moscow, Russia.

This conference, attended by over 90 Ministers of Health asserted that the right of everyone to the enjoyment of the highest attainable standards of physical and mental health cannot be achieved without greater measures at global and national levels to prevent and control NCDs.

The Moscow declaration stated that “a paradigm shift is imperative in dealing with NCD challenges, as NCDs are caused not only by biomedical factors, but also caused or strongly influenced by behavioural, environmental, social and economic factors”<sup>2</sup>. Leaders committed to working to combat NCDs not only at the level of Ministries of Health but through a “whole of government” approach.

### 1.2.1 United Nations High level Meeting on NCDs

Leading all the significant initiatives on NCDs during 2011 was the High Level Meeting of Heads of State and Governments on the Prevention and Control of Non-Communicable Diseases during the 66<sup>th</sup> session of the United Nations General Assembly in September.

Of particular significance is that this meeting classified NCDs not just as a health concern but a major development issue and adopted a political declaration to increase global focus and attention to prevent and control NCDs, including through involvement of a number of sectors and role-players. This meeting was only the second time that Health was discussed at the General Assembly, the first being HIV and AIDS in 2001.

The United Nations Political Declaration (Annex B) highlights the key recommendations for reducing NCDs which are all aligned to the WHO Action Plan for the Global Strategy for the Prevention and Control of Non-communicable. These include:-

- Implement a multi-sectoral response to NCDs
- Reduce risk factors and create health-promoting environments
- Work with the private sector in addressing NCDs
- Strengthen national policies and health systems
- Increase international cooperation, including collaborative partnerships
- Increase research and development
- Strengthen monitoring and evaluation

In signing the above declarations South Africa has committed to increased efforts to reduce NCDs.

<sup>1</sup> These include Resolutions WHA53.17 (May 2000) on the Prevention and Control of Non-Communicable Diseases; WHA61.14 (May 2008) on Prevention and Control of Non-Communicable Diseases: Implementation of the Global Strategy.

<sup>2</sup> These include Resolution 56.1 – WHO Framework Convention on Tobacco Control, WHA 55.23 on Diet, Physical activity and Health and Resolution WHA 63.13 on The Global strategy to reduce the harmful use of alcohol.

# CHAPTER 2: EPIDEMIOLOGICAL PROFILE OF NON-COMMUNICABLE DISEASES IN SOUTH AFRICA



# Chapter 2: Epidemiological Profile of Non-Communicable Diseases in South Africa

## 2.1 What are non-communicable diseases and which conditions are included in this strategy?

As there is ambiguity both nationally and internationally as to what is and what is not a NCD it is important from the outset of this document to be clear on which conditions are included in this strategy. NCDs are health conditions or diseases which are “non-infectious”.

However because the categorisation is a negative one rather than a definition with positive and identifiable features there is often confusion with regard to which conditions should be included as NCDs.

In most current literature as well as WHO resolutions on NCDs four disease areas are almost always included. These are cardiovascular diseases, diabetes, chronic respiratory conditions and cancer. These conditions are also sometimes referred to as the “major” or “principle” NCDs.

The reasons for the lack of ambiguity for their inclusion (in addition to being non-infectious) are firstly the high mortality that results from these conditions and secondly these diseases are mostly preventable through modification of four main risk factors, namely:

- Tobacco use
- Physical inactivity
- Unhealthy diets, and
- Harmful use of alcohol

However when examined from a prevalence and a burden of disease perspective rather than only from resultant mortality, there are other non-infectious diseases that justify the right to be included as important non-communicable diseases.

Moreover, as seen in Table 1 these “other” diseases also share the main behavioural risk factors mentioned. These conditions include mental disorder, oral disease, eye disease, kidney disease and muscular-skeletal conditions (including arthritis and rheumatoid conditions).

Table 1 Common risk factors for non-communicable diseases

Risk factor	Cardiovascular diseases	Diabetes	Chronic respiratory conditions	Cancer	Mental disorder	Oral diseases	Eye disease	Kidney disease	Muscular-skeletal conditions
Diet	X	X		X	X	X	X	X	X
Smoking	X	X	X	X		X	X	X	X
Physical activity	X	X		X	X			X	X
Alcohol	X	X		X	X	X		X	X

For the purposes of this strategy all the above conditions are thus included as “non-communicable diseases”. While clearly from a clinical perspective each health condition requires its own unique interventions, from a public health perspective addressing these conditions requires common interventions.

## 2.2 Non-communicable diseases - a growing global epidemic.

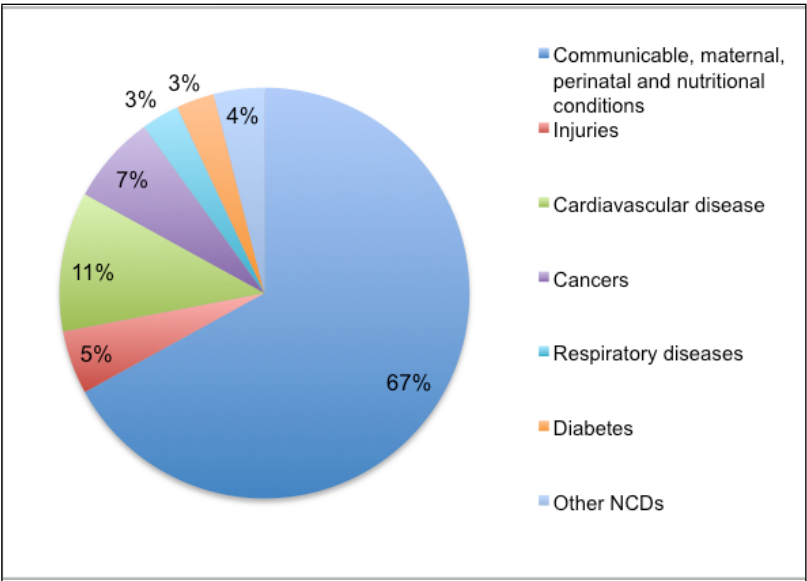
The World Health Organisation reports that more than 36 million people died globally from NCDs in 2008, which constitutes 63% of all deaths<sup>3</sup>. This was mainly from cardiovascular diseases (48%), cancers (21%), chronic respiratory diseases (12%), and diabetes (3%). Critically, more than 9 million of these deaths could have been prevented. Premature deaths from NCDs are particularly high in poorer countries with around 80% of such deaths occurring in low and middle income countries.

Around a quarter of deaths from non-communicable diseases occur in people under 60 years of age. Globally deaths due to NCDs are projected to increase by 17% over the next ten years, but the greatest increase (24%) is expected in the African region. NCDs also kill at a younger age in low- and middle-income countries, where 29% of NCD deaths occur among people under the age of 60, compared to 13% in high-income countries. By 2030 it is estimated that NCDs will contribute 75% of global deaths<sup>4</sup>.

### 2.3 Mortality and Morbidity in South Africa

This section provides data on mortality and morbidity from NCDs as well as outlining information on key risk factors. However it must be noted that detailed information on NCDs in South Africa is constrained by inadequate surveillance and research. Old and at times questionable accuracy of data restricts precise planning and the collection of information is therefore a key component of this strategic plan (see Chapter 6). Notwithstanding, the following data reflects the most current information available and certainly indicates the dire need for greater attention to prevention and control of NCDs than is currently the case.

As seen in the chart below, according to the World Health Organisation, NCDs accounted for 29% of all deaths in South Africa in 2008 – 18% alone due to cardiovascular disease and cancers<sup>5</sup>.



**Figure 2: Proportional mortality in South Africa, 2008<sup>6</sup> (percentage of total deaths, all ages)**

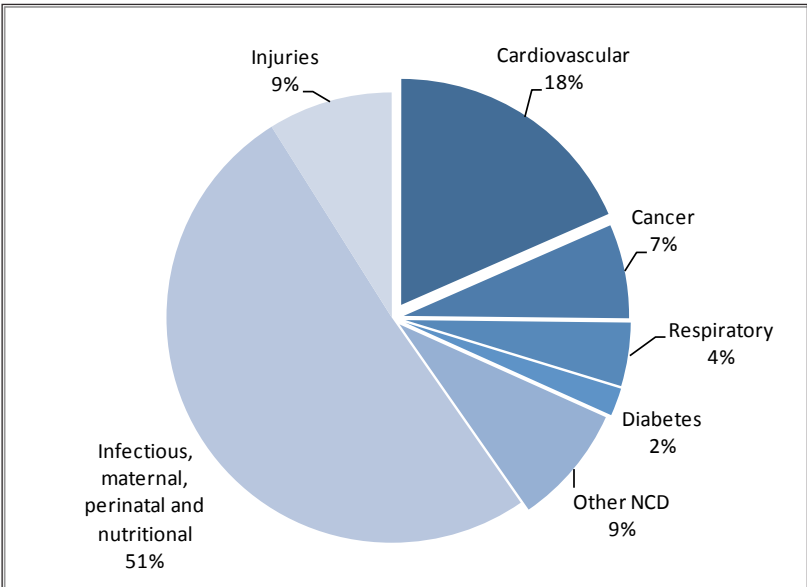
**Table 2: 2008 Estimates on NCD mortality<sup>7</sup>**

	Males	Females
Total NCD Deaths (per 100,000 population)	92.4	98.1
NCD deaths under 60 years of age (% of NCD deaths)	39.7	28.7

**Table 3: Age-standardised death rate per 100,000 (2008)**

	Males	Females
All Non-communicable diseases	733.7	555.2
Cancers	202.2	123.9
Chronic respiratory diseases	86.6	44.5
Cardiovascular diseases and diabetes	327.9	315.2

Figures from Statistics South Africa show an even higher proportion of all deaths being caused by NCDs (i.e. 40%), as follows:-



**Figure 3**

The major causes of cancer related deaths for men and women are reflected in Figures 4 and 5

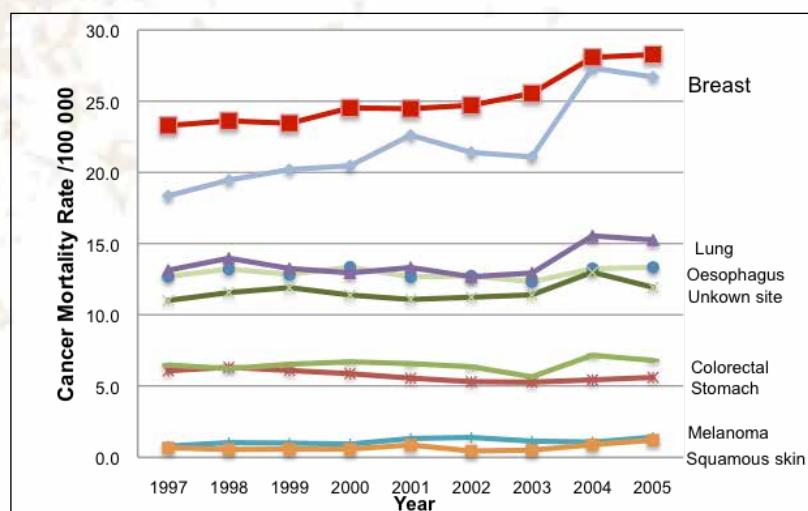


Figure 4. Mortality rate by cancer type among women in South Africa

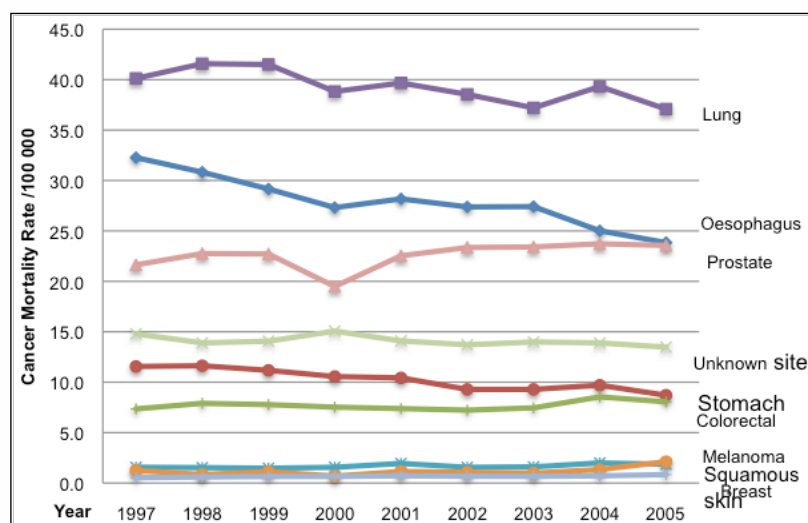


Figure 5 Mortality rate by cancer type among men in South Africa

**Kidney Disease.** Although no accurate South African data exists the rate of global End Stage Renal Failure is approximately 300/million population per year. This translates to around 15 000 new cases in South Africa per annum.

In terms of the last available burden of disease study Non-communicable diseases contribute 33% of the total burden of disease.

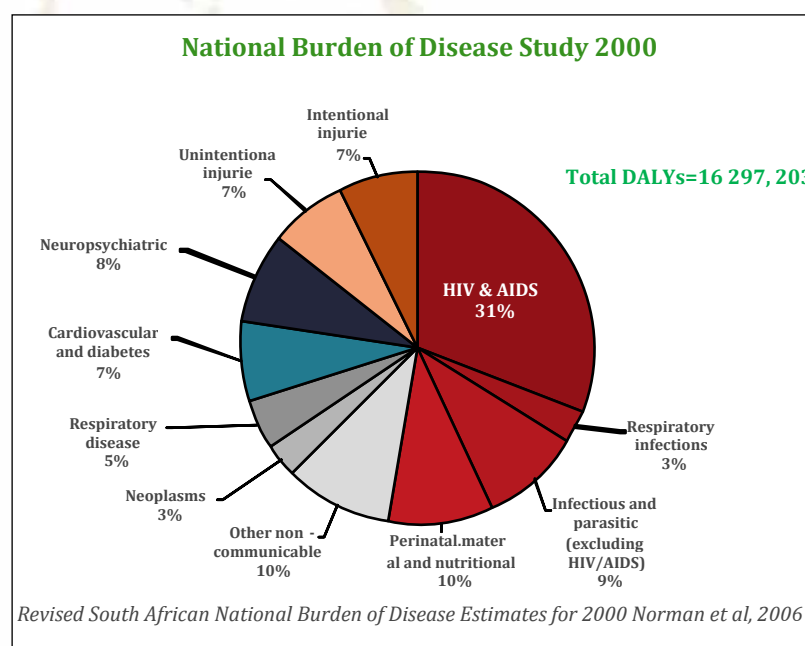


Figure 6 National Burden of Disease<sup>8</sup>

Diseases of high prevalence and high burden but low or relatively low mortality include oral health, mental health, eye health and muscular skeletal disorders.

For example:

- **Dental caries** (tooth decay) is the most common condition affecting children in South Africa. Sixty percent of 6 year olds, in their primary dentition, have decay and 55% untreated decay, therefore 91% goes untreated. Only 18% of 12 year olds have healthy gums and only 2% of 44 year olds have healthy gums<sup>9</sup>.
- The first nationally representative **mental health** epidemiological study, the South African Stress and Health (SASH) survey conducted between 2003 to 2004 on a sample of 4 351 adults of all races and ethnic groups found that 16.5% of adults have experienced a mood, anxiety or substance use disorder in the previous 12 months. The life time prevalence for any disorder was 30.3%<sup>10</sup>.

**Table 4: Twelve months prevalence of adult mental disorders in South Africa**

Disorder	%
Anxiety	8.1
Mood	4.9
Impulse	1.8
Substance Abuse	5.8
Schizophrenia	1.0
Bipolar	1.0
Any anxiety, mood, impulse or substance use disorder	16.5

The 2<sup>nd</sup> South African Youth Risk Behaviour Survey conducted in 2008 on a sample of 10 270 learners from public schools in all nine provinces reported that 23.6% of learners had feelings of sadness or hopelessness during the past six months to the extent that they stopped doing some usual activities for two or more weeks in a row.

The prevalence of sadness and hopelessness among learners increased with grade, and significantly more grade 11 learners reported higher rates of sadness and hopeless feelings<sup>11</sup>.

- **Eye Health.** In South Africa there are approximately 5000 people per million population with cataract (i.e. around 250 000 people). There are approximately 1000 glaucoma-blind persons per million population with the prevalence of chronic glaucoma being 5%. Primary risk factors are age, ethnicity and genetic predisposition. In 2002 it was estimated that diabetic retinopathy accounted for 5% of world blindness or close to 5 million blind persons and is considered to be the result of vascular changes in the retinal circulation<sup>12</sup>.
- **Musculo-Skeletal Disorders.** Lifetime risk of fracture due to **osteoporosis** in Caucasian women is 30-40% and about 20% in men. Up to 20% of people with hip fractures die within one year, and more than 50% never gain the functional ability to lead an independent life<sup>13</sup>. No figures are available for other population groups in South Africa.

Lifetime risk of **rheumatoid arthritis** per 100 000 population in South Africa for males in the 35-44 age group is 2857; from 45-54, 2740; from 55-64, 3846; from 65-74, 4286 and 75 and over, 8000. For women the risk in the 45-54 age group is 2564; in the 55-64 age group 3704; in the 65-74 age group 6173 and for people 75 and over 6061.

Prevalence of **osteoarthritis** of the hip per 100 000 population in South Africans 55 or over is 3278 in males and 2899 in females.

## 2.4 Behavioural Risk Factors

As mentioned previously NCDs are caused to a large extent by four behavioural risk factors. These are tobacco use, unhealthy diet, insufficient physical activity and the harmful use of alcohol.

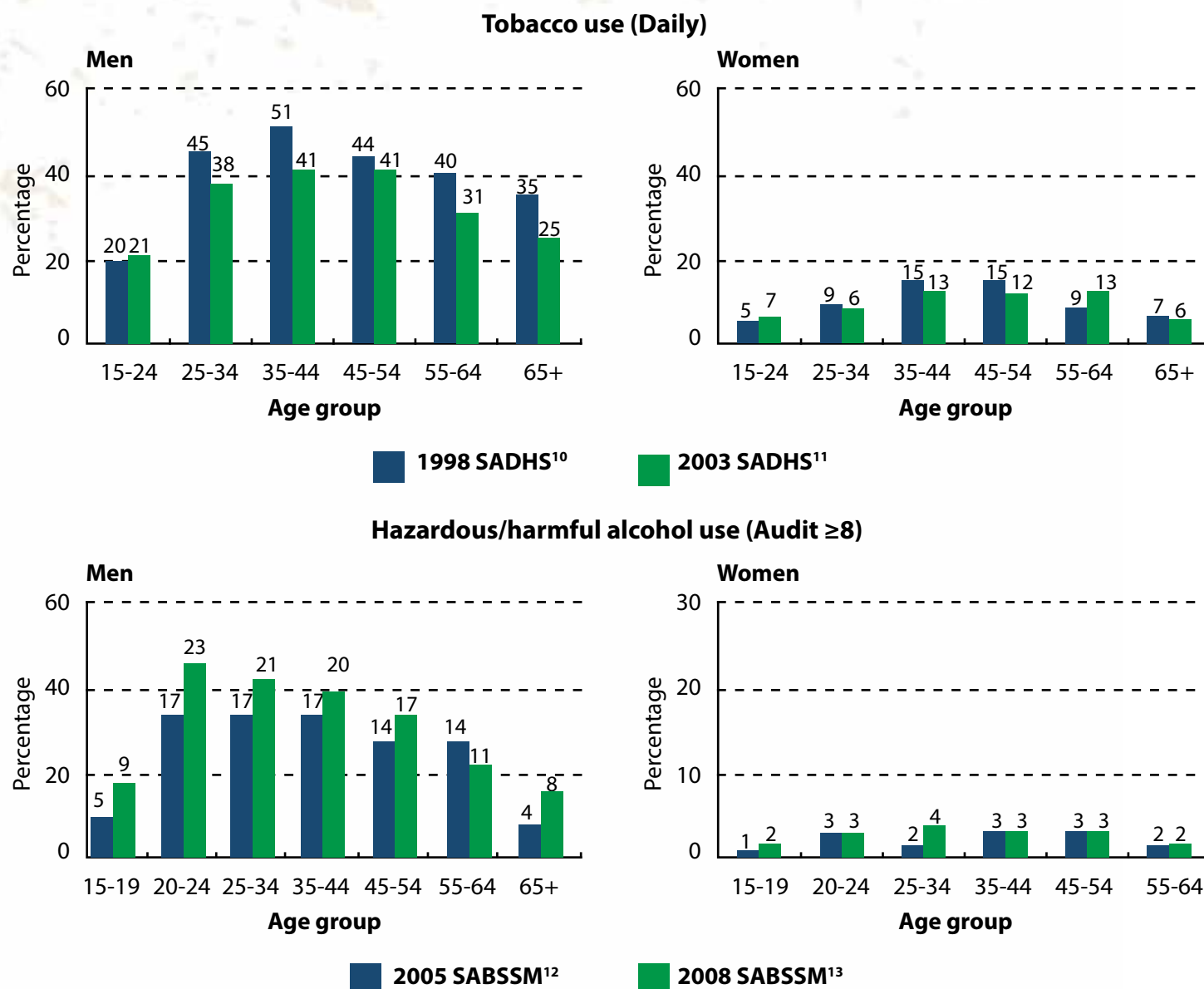
Globally, raised blood pressure is responsible for 13% of deaths, tobacco use 9%, raised blood glucose 6%, physical inactivity 6%, overweight and obesity 5% and alcohol 3.8%<sup>14</sup>. However, it is important to note that some NCDs are caused by viruses that lead to certain cancers (e.g. liver and cervical cancer). Most cervical cancer is preventable through vaccine against human papilloma virus.

**Table 5: WHO: Behavioural risk factors for NCDs in South Africa**

	Males	Females	Total
<i>Behavioural (2008 estimated prevalence)</i>			
Current daily tobacco smoking	21.2	7.0	14.0
Physical inactivity	46.4	55.7	51.1
Raised blood pressure	43.1	41.4	42.2
Raised blood glucose	10.3	11.0	10.6
Overweight	58.5	71.8	65.4
Obesity	21.0	41.0	31.3
Raised cholesterol	31.3	36.5	34.0

The Medical Research Council (MRC) also provides the following compelling data on the increase of risk behaviours for non-communicable diseases in South African.

## 2.4.1 Tobacco use and harmful Alcohol use



**Figure 7: Tobacco Use and Hazardous/Harmful Alcohol Use, 1998-2003<sup>17</sup>**

In 2009 around 23.7% of adults (36.7% of men and 10.3% of women) smoked cigarettes. This is a decrease of around 7% of smokers from 1995 when anti-tobacco legislation was introduced in South Africa and constitutes a 22% reduction in smoking behaviour.

## 2.4.2 Alcohol

South Africa consumes in excess of 5 billion litres of alcohol annually which equates to 9-10 litres of pure alcohol per person<sup>18</sup>. According to the latest WHO review of global drinking patterns while abstinence from drinking in South Africa is high (51% male and 79% female), among drinkers we fall into category of countries having the highest consumption of absolute alcohol per drinker per year<sup>19</sup>.

The South African Demographic and Health Survey found that a third of adults who drink, drink at risky levels over weekends. In addition, 1 in 4 adult males and 1 in 10 adult females reported symptoms indicative of alcohol problems<sup>20</sup>.

### 2.4.3 Overweight and obesity

According to the National Youth Risk behaviour Survey 19.7% of learners were overweight, with significantly more female (27.8% ) than male (11.2% [9.3 - 13.4]) learners being overweight. The national prevalence of obesity was 5.3% with significantly more female (7.2%) than male learners obese (3.3%)<sup>21</sup>.

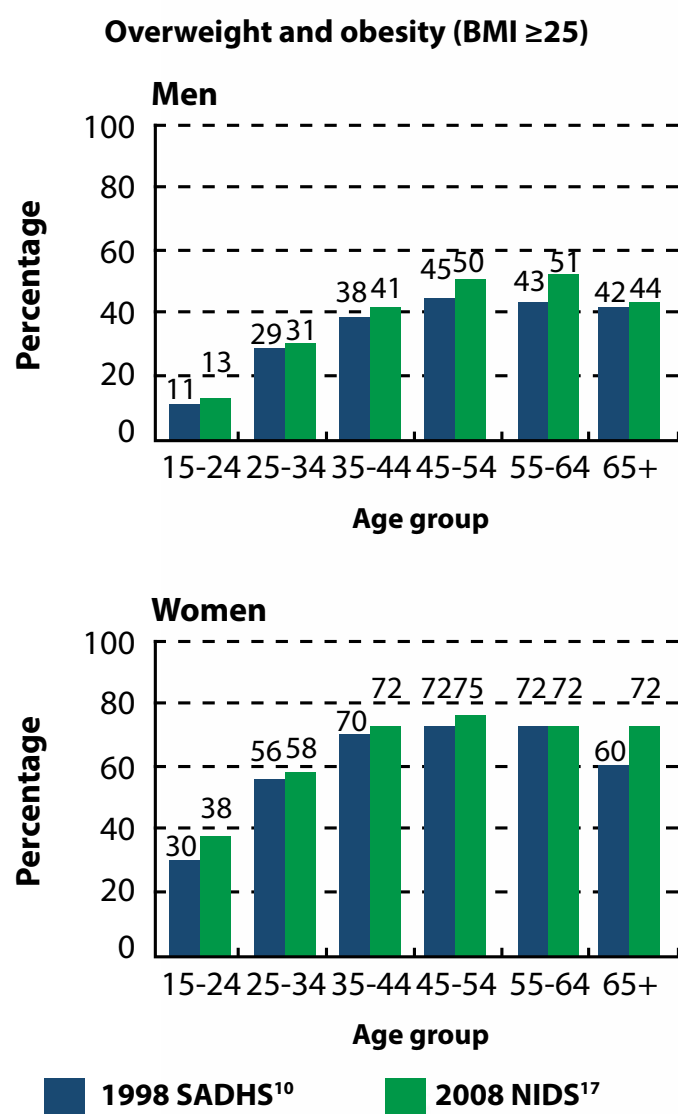


Figure 8: Overweight and Obesity, 1998-2003

### 2.4.4 Physical Inactivity

#### Physical inactivity SADHS 2003<sup>11</sup>

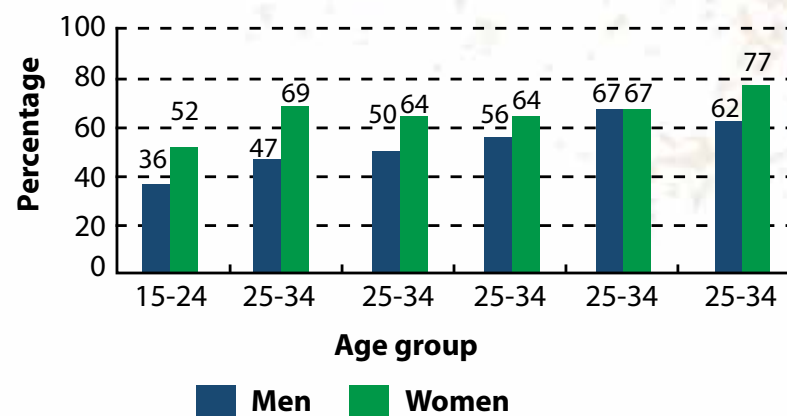
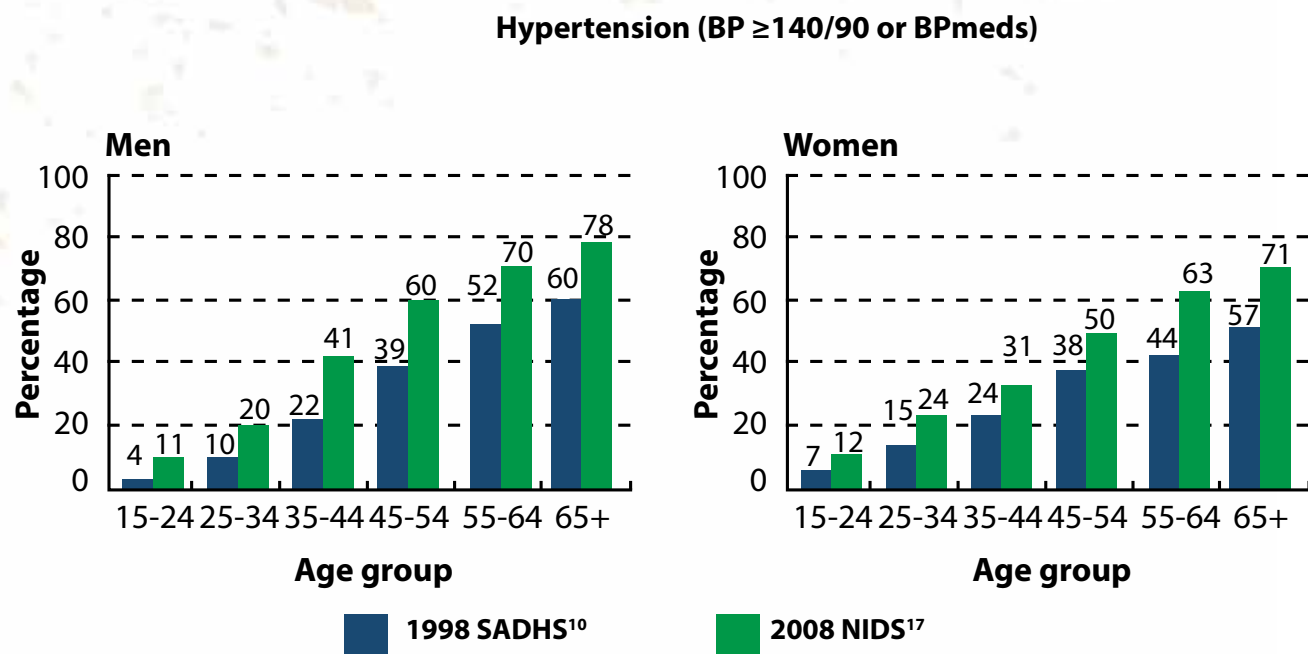


Figure 9: Physical Inactivity, 2003<sup>15</sup>

The SA Youth Risk Behaviour Survey found that 38% of all school children participated in less than the recommended levels of physical activity, with more than a third of the boys and 43% of the girls being sedentary<sup>16</sup>.

## 2.4.5 Hypertension



**Figure 10: Hypertension, 1998-2008<sup>22</sup>**

The significant rise in hypertension predicts increases in stroke and heart attacks.



# CHAPTER 3: VISION AND TARGETS FOR REDUCING NCDS IN SOUTH AFRICA



## Chapter 3 Vision and targets for reducing NCDs in South Africa

### 3.1 Vision:-

A long and healthy life for all through prevention and control of non-communicable diseases.

### 3.2 A comprehensive approach to combating NCDs

This strategy has three major components, these are to:-

Sub-strategy 1: Prevent NCDs and promote health and wellness at population, community and individual levels.

Sub-strategy 2: Improve control of NCDs through health systems strengthening and reform.

Sub-strategy 3: Monitor NCDs and their main risk factors and conduct innovative research.

Achieving a long and healthy life for all requires interventions that promote the health of the population and prevents diseases due to NCDs. Effective prevention necessitates a broad multi-sectoral approach involving different government departments, civil society organisations, the private sector, media as well as commitment to health and wellness from individuals themselves.

Equally importantly, promoting longer and healthier lives needs effective and efficient health systems, human resources and optimal clinical care and treatment. NCDs need to be identified early and managed cost-effectively. South African research has highlighted the need to improve the quality of NCD services at all levels but particularly at primary health care in all sectors of the population, especially among the poor.

Though this strategic plan examines prevention and control strategies and highlights interventions beyond the health sector, the details of how sectors outside of health will implement interventions falls beyond the scope of this plan and will be covered in the plans of these other sectors.

The third component of the comprehensive approach to NCDs taken in this strategy is to monitor progress and evaluate where and how improved outcomes can be achieved. It also encourages innovative research that will allow more effective interventions to reducing NCDs

Health care in South Africa is in the process of major reform. Prevention and control of NCDs will form part of this reform. Part of this plan is to ensure that non-communicable disease prevention and control are woven into the National Health Insurance, re-engineering of primary health care, human resource development and increasing school health services strategies, which are all in the process of being implemented.

### 3.3 Targets for reducing Non-Communicable Diseases

According to targets set by the Health Data Advisory and Coordinating Committee, life expectancy must increase from the current 54.0 years for males and 59.0 years for females (2009 baseline) to 56.0 years for males and 61.0 years for females by 2014. To achieve this there *must* be a reduction in premature deaths from non-communicable diseases. Attaining a “healthy life” means prevention of disease but also, and in accordance with the WHO definition of health, the promotion of physical, mental and social “wellbeing” or “wellness” in the population<sup>3</sup>.

Addressing NCDs requires an integrated strategy and effort of “social engineering” and biomedical and behavioural interventions implemented through government, civil society and other stakeholders.

#### Targets for NCDs

The South African Declaration for Prevention and Control of Non-communicable diseases commits to a set of 10 goals and targets to be achieved by 2020 (See Appendix 2). As this Strategic Plan ends in 2017, it will contain an intermediate set of targets that will contribute towards the 2020 targets.

<sup>3</sup> The WHO definition of Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

The 2020 goals and targets are:

1. Reduce by at least 25% the relative premature mortality (under 60 years of age) from Non-communicable Diseases by 2020;
2. Reduce by 20% tobacco use by 2020;
3. Reduce by 20% the per capita consumption of alcohol by 2020;
4. Reduce mean population intake of salt to <5 grams per day by 2020;
5. Reduce by 10% the percentage of people who are obese and/or overweight by 2020;
6. Reduce the prevalence of people with raised blood pressure by 20% by 2020 (through lifestyle and medication);
7. Increase the prevalence of physical activity (defined as 150 minutes of moderate-intensity physical activity per week, or equivalent) by 10%
8. Every woman with sexually transmitted diseases to be screened for cervical cancer every 5 years, otherwise every woman to have 3 screens in a lifetime (and as per policy for women who are HIV/AIDS positive).
9. Increase the percentage of people controlled for hypertension, diabetes and asthma by 30% by 2020 in sentinel sites; and
10. Increase the number of people screened and treated for mental disorder by 30% by 2030

Achieving this vision and meeting these targets requires addressing the primary causes of mortality and morbidity or the broad “social determinants” of NCDs; preventing the specific behavioural risk factors and ensuring that the health system is geared to undertake early detection, cost-effective and appropriate treatment and control. The toll of morbidity and premature mortality can be reduced by effective implementation of current and proposed promotive, preventive, curative, rehabilitative and palliative services. More specifically the vision is premised on effective collaboration, equitable funding, service equity, good management and the availability of an appropriately skilled workforce.

**CHAPTER 4:  
COST-EFFECTIVE  
INTERVENTIONS FOR  
ADDRESSING NON-  
COMMUNICABLE DISEASES**



## Chapter 4: Cost-effective interventions for addressing Non-Communicable Diseases

Addressing NCDs will require significant resources in a country with many competing demands on the fiscus, especially in light of the global economic downturn. The WHO estimates that the annual cost for addressing NCDs in an upper middle-income country like South Africa is more than R1 billion – around R150 million for population-based interventions, and R1.125 billion for individual-based measures<sup>23</sup>. As this is unrealistic at this point there is an imperative to get the best possible outcomes for every Rand spent.

Support for addressing the four common risk factors is demonstrated in “Best Buy” interventions of risk factor reduction and treatment as they relate to cost of implementation, health impact and cost effectiveness. Interventions related to reducing tobacco use and the harmful use of alcohol and improving diet and increasing physical activity are low cost, have large to modest health impact and are very cost effective<sup>24</sup>.

Interventions to tackle non-communicable disease risk factors: identifying ‘best buys’

**Table: 6: The most cost-effective interventions to address diet, physical activity and obesity are<sup>25</sup>,**

RISK FACTOR / DISEASES	INTERVENTIONS / ACTIONS	COST OF IMPLEMENTATION (low=<I\$1 per capita, high=>I\$2 per capita)	HEALTH IMPACT (DALYs per 1m population) (small<100large >1000)	COST EFFECTIVENESS (1\$ per DALY averted) (very= <GDP per capita, quite=1-3GDP per capita)
TOBACCO USE	Raise taxes on tobacco products	low	large	Very
	Enforce bans on tobacco advertising	low	modest	Very
	Smoke free workplaces	low	modest	Quite
	Packaging, labelling, and awareness counter measures	low	modest	Very
HARMFUL USE OF ALCOHOL	Raise taxes on alcoholic beverages	low	modest	Very
	Enforce bans on alcoholic advertising	low	modest	Very
	Restrict access to retiled alcohol	low	modest	Very
	Enforce drink-driving laws	quite	modest	Quite
HEALTHY DIET AND PHYSICAL INACTIVITY	Reduce salt intake	low	large	Very
	Food taxes on unhealthy food (foods high in fats and sugar) and food subsidies on healthy food (fruits and vegetables)	low	modest	Very
	Physician counselling	high	large	Quite
DIABETES	Glycemia Control	high	large	Quite
CARDIOVASCULAR DISEASE	Hypertention drug treatment	low	large	Very
CANCER	Treatment of Stage 1 Breast Cancer	low	modest	Very
	Cervical Cancer Screening (PAP Smear) and treatment	low	modest	Very
RESPIRATORY DISORDER	Inhaled corticosteroids for asthma	low	small	Quite

**Table 7: Best Buys for Tackling Diet, Physical Activity and Obesity**

	Cost in Rand per Head (2010)
Fiscal measures (e.g. taxes)	R0.20
Food advertising regulation	R0.90
Food labelling	R2.50
Worksite interventions	R4.50
Mass media campaigns	R7.50
School-based interventions	R11.10
Physician counselling	R11.80

# CHAPTER 5: ADDRESSING NON-COMMUNICABLE DISEASES IN SOUTH AFRICA



# Chapter 5: Addressing Non-Communicable Diseases in South Africa

This Strategic Plan for NCDs is built on a foundation of action over the last 15-20 years in which numerous legislative and policy initiatives as well as guidelines and standards have been developed by the National Department of Health in addressing risk factors and control of NCDs. Important documents in this regard are listed in Appendix 3.

This section concentrates on the 3 key broad public health mechanisms for reducing NCDs outlined in Chapter 3 and

outlines the directions needed to achieve the targets set at the South African NCD summit.

These domains are 1) Prevention and Promotion, 2) Diagnosis and control of NCDs through Health Systems Strengthening and 3) Monitoring, Surveillance and Research. In each of these domains cost-effective and evidence based interventions are prioritised for implementation.

## 5.1 Prevention

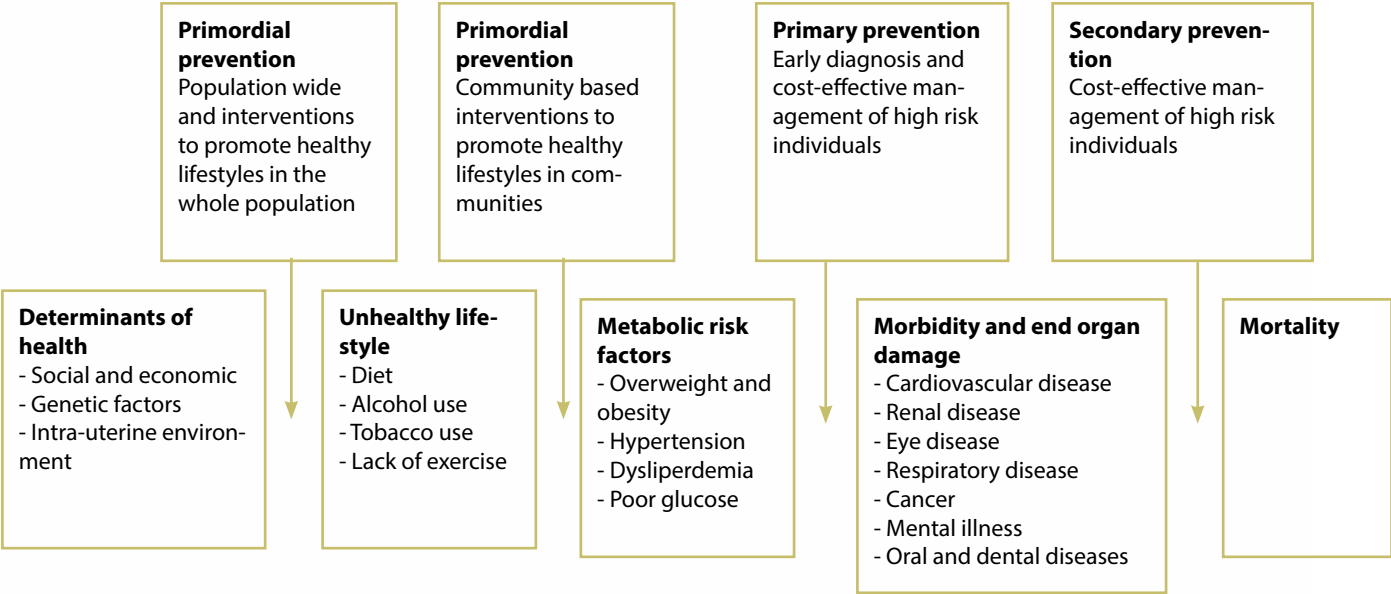


Figure 11: Schematic framework for promoting healthy lifestyles and preventing NCDs

The underlying risk factors of NCDs are largely preventable. Interventions are needed at population level (primordial prevention), at community level (primordial and primary prevention), through early diagnosis (primary prevention) and through comprehensive and cost-effective management (secondary prevention). Figure 11 provides a schematic framework for promoting healthy lifestyles and preventing NCDs.

Though NCDs are often referred to as diseases of lifestyle, and associated with increasing wealth, in South Africa burden of NCDs in rural and poor socio-economic areas is high<sup>26</sup>. Therefore addressing “social determinants” such as poverty and inequality are important for reducing NCDs.

For example stroke resulting from hypertension is strongly linked to poverty, mainly due to late diagnosis and poor access to health care in rural areas.

In addition, poor people have less access to cheap, nutritious foods and areas and opportunities for physical activities and recreation.<sup>27</sup>

The consequences are negative habits forming such as alcohol and smoking intake and reducing exercise. Due to the high levels of poverty and unemployment in South Africa, the combating of NCDs is linked to poverty alleviation, job creation, improved public transportation and more equitable health services.

### **5.1.1 Intersectoral Collaboration for Prevention of NCDs**

The improved health, life chances and quality of life of a population require a shift away from departments working in isolation and all key sectors must recognise their role in working toward a healthy population<sup>28</sup>. The complex interaction of the social, environmental and economic determinants of health require that all government departments take health into account. This will result in more efficient government in terms of both improved health and achieving development goals.

Taking overweight as an example, it is not possible for individuals to simply change their behaviours through education by health promoters or practitioners unless healthy foods are accessible and available to them and facilities for exercising are within reach. There is a shortage of healthy low-fat food and little fresh fruit and vegetables in most townships and in many rural areas and the majority of local shops sell cheap fatty foods rather than healthy goods.

In 2009 a study of supermarkets in rural South Africa found that healthier foods typically cost between 10% and 60% more than unhealthy ones when compared on a weight basis (R per 100g) and between 30% and 110% more when compared based on the cost of food energy (R per 100 kJ)<sup>29</sup>.

Access to healthy foods hence requires government interventions by (at least) the Departments of Agriculture, Trade and Industry, Finance, Basic and Higher Education. Addressing obesity through physical activity needs at least the involvement of Sport and Recreation, Transport, Basic Education, Urban Settlements and Trade and Industry. Co-

ordination with non-governmental organisations and the private sector is also critical.

The World Health Organisation's (WHO) Commission on the Social Determinants of Health points out that reducing broad based inequality improves the health of all people of the country<sup>30</sup>. Additionally it is apparent that evidence and pathways of the relationships between population health and the social, economic and political environments in which people live are now better understood and the "causes of the causes" of ill-health must be addressed.

Political leadership and strategic vision from a broad based context created by the Government Programme of Action and the Negotiated Service Delivery Agreement (NSDA) creates a viable framework for intersectoral collaboration. Noting that a politically enabling environment is a requirement for intersectoral collaboration, at the First Global Ministries Conference on Healthy Lifestyles and Non-Communicable Diseases held in Moscow (April 2011) a discussion paper on Intersectoral Collaboration proposed a roadmap with steps which should form part of a continuous cycle of learning<sup>31</sup>.

The roadmap proposes the development of an engagement strategy or policy that can be used to foster common understanding between sectors. This Integrated Strategy on the Prevention of the Common Risk Factors provides the interface to moving toward a new social contract between government sectors and partners to achieve "Health in all Policies" and should be utilised in formulating a national inter-sectoral and multi-partnered response.

## Population and community based interventions

Figure 8 demonstrates interventions proposed to reduce the impact of the main behavioural risk factors and outlines examples of which sectors will contribute to the planned output<sup>32</sup>.

RISK FACTOR	INTERVENTIONS	SECTORS (not inclusive list)
Use of Tobacco and Tobacco Products	Tobacco control <ul style="list-style-type: none"> <li>• Enforce existing legislation</li> <li>• Strengthen compliance of legislation</li> <li>• Finalise regulations on: smoke free public places; display of tobacco products at point of sale &amp; pictorial messages and warnings on packages</li> <li>• Intensify education and support for cessation</li> </ul>	Departments: Finance (Treasury), Trade & Industry, DOBE, DOH; South African Revenue Services, Civil Society, Non-governmental organisations; local government
Harmful Use of Alcohol	Reduce harmful effect of alcohol <ul style="list-style-type: none"> <li>• Collate and change legislation</li> <li>• Reduce accessibility and availability of alcohol</li> <li>• Improve care and treatment, including palliative care</li> <li>• Health education and promotion</li> </ul>	Departments: Finance (Treasury), Trade & Industry, DOBE, DHET DOH, Department of Social Development, Transport; Public Service and Administration, South African Police Service, Justice and Constitutional development, Correctional Services, Civil Society, Religious Organisations, local government i.e. and Transport
Physical Inactivity	Enable implementation of Global recommendations on Physical Activity <ul style="list-style-type: none"> <li>• Promote physical activities</li> <li>• Create the environment for physical activities to take place.</li> </ul>	Departments of Sports & Recreation, DOSD, DOBE, Human Settlement, Transport, Civil Society, Older Persons Support Groups, Occupational Health; local government
Unhealthy Diet	Enable implementation of the Global recommendation on Diet and Nutrition <ul style="list-style-type: none"> <li>• Reduce salt in common foods</li> <li>• Implement measures to reduce obesity</li> <li>• Implement &amp; monitor regulations on Trans Fats</li> <li>• Implement population prevention strategies on childhood obesity</li> </ul>	Departments: Finance (Treasury), Trade & Industry, DOE, DOH; Civil Society, Food Industry, Baking Industry, Consumer Groups; local government

**Figure 8: Sectors involved and proposed interventions as per risk factor**

### 5.1.1.1 Use of Tobacco and Tobacco Products.

The government's commitment to comprehensive legislation and enforcement on tobacco and tobacco products (The Tobacco Products Control Act in 1993 and three amendments in 1999, 2007 and 2008), excise tax increases and effective civil-society-driven public health activism has ensured the successful enactment of tobacco control legislation in the country. The tobacco control legislation strongly influenced a decline in smoking prevalence between 1993 and 2008.

However, in recent years, the decline in smoking prevalence has reached a plateau indicating a need for the strengthening and review of tobacco control policies and interventions.

The following package of six cost-effective policy interventions (the MPOWER package), which builds on the measures for reducing demand contained in the WHO Framework Convention for Tobacco Control are required:

- monitor tobacco use and tobacco-prevention policies
- protect people from tobacco smoke in public places and workplaces
- offer help to people who want to stop using tobacco
- warn people about the dangers of tobacco
- enforce bans on tobacco advertising, promotion and sponsorship
- Raise tobacco taxes and prices.

### 5.1.1.2 Diet

The South African population suffers from a double burden of nutrition-related diseases: about a third of children suffer from some form of under-nutrition, while more than half of adult South Africans are either overweight or obese, suffering from over-nutrition. Undernourished children develop into adults with an increased risk of overweight, obesity and NCDs when they are exposed to an unhealthy food environment. Also, many obese individuals are micronutrient-deficient, which further increases their risk of NCDs.

Dietary changes that are needed in South Africa include consumption of less salt, less fast and fried foods and snacks; consumption of lean meat and low-fat dairy products, avoidance of hard margarines in home and commercially baked products, inclusion of 2-3 fish dishes per week, consumption of whole grains, fruit, vegetables and legumes, and other traditional foods and dishes, and decrease use and intakes of sweetened (sugary) foods and drinks. Actions are required in the following areas:-

- **Sensitise all role-players** on what each one should do to create a better (healthier) food environment. This includes a range of government departments, NGOs, food producers and the public.
- **Legislate for a better food environment.** The Department of Health has recently introduced legislation/regulations to reduce trans fatty acids, but additional legislation/regulation may still be needed. Regulations to reduce salt in processed food are in process as high dietary salt intake is estimated to cause about a third of all hypertension and therefore reduction of salt will decrease strokes and heart disease. Regulation is critical as most salt intake is in processed food rather than discretionary. Consideration may also be given to banning junk food advertisements to children during key television programmes, to control what is sold to children during school time, to control meals served to the work force (e.g. in the army), to tax undesirable processed foods and exempt healthier choices from taxation, to enforce better control of food and nutrient supplements.

- **Create opportunities for innovative actions.** Nutrition-related NCD risk factors can be drastically reduced if the whole population consume more folate and fibre-containing green, indigenous leafy vegetables. But to promote these foods, they must be easily available and be at affordable prices. This requires the involvement of a number of different government sectors working together towards better health outcomes.

### 5.1.1.3 Promoting physical activity

To increase habitual levels of physical activity of all South Africans across the life-course and to promote health and prevent disease government aims to:-

- Create knowledge and awareness concerning the importance of regular physical activity for health and wellbeing and in the prevention of disease.
- Increase and promote inter-sectoral collaboration in order to increase opportunities to be physically active.
- Implement physical activity programmes and related interventions to promote physical activity.
- Disseminate examples of evidence-based interventions and programmes and policies to promote physical activity.

### 5.1.1.4 Reducing the harmful use of alcohol

An Inter-Ministerial Committee on Substance Abuse was set up by Cabinet and a set of inter-sectoral recommendations for the prevention and control of substances was presented and accepted by cabinet in August 2011. This includes action plans for 10 different Departments.

The specific plans for the Department of Health are to:

- revise regulations on warning labels on alcohol containers;
- provide information to women on dangers of drinking in pregnancy and assist women in need of treatment;
- develop guidelines for detoxification for use in health facilities and treatment centres;
- improve referral lines within the health department and between health and other departments;

- screen and provide brief interventions for alcohol in selected health centres, including patients with HIV, TB, trauma units, antenatal clinics and psychiatric services.

In addition to these action plans the Department of Health has been mandated by the Inter-Ministerial Committee to introduce legislation banning alcohol advertisements and sponsorships.

#### **5.1.1.5 Introduction of Human Papilloma virus Vaccine**

Human papilloma virus (HPV) causes approximately half a million new infections and around 270 000 deaths from cervical cancer every year worldwide, and 80% of these occur in resource-poor countries. HPV vaccines have been shown to be safe and highly effective against infection. Modeling studies have estimated that a vaccine preventing 75% of HPV infections could be associated with a 70–83% reduction in HPV-related cancer. Depending on the price that the vaccine can be purchased at, this can be a highly cost effective population based intervention.

#### **5.1.1.6 School Health Services**

Schools are a particular important vehicle for primary prevention of NCDs. For example in addition to programmes within life-orientation classes that must encourage healthy life-styles through improved dietary intake, encouraging exercise, discouraging learners from smoking and drinking alcohol, school health nurses can play a pivotal role in reducing risk factors for NCDs through screening, education and health promotion activities. Likewise oral hygienists could reduce oral and dental diseases through screening, education and fissure sealant applications.

#### **5.1.2 Role of civil society organisations (CSOs) in promoting health**

There are many barriers to healthy living. These include commercial entities presenting unhealthy temptations to the vulnerable such as children which turn into bad habits, high prices and inaccessibility of healthy foods, misperceptions and inadequate health literacy. It is necessary for the public to mobilise for better health through active advocacy and social mobilisation and responsible bodies that are protected from commercial influence have a very important

role in promoting population health. Partnerships between government and civil society organisations can contribute considerably to improving health. Where possible joint campaigns can be run, however the independence of CSOs should be maintained for an effective advocacy role. CSOs can assist in ensuring that public policies and practices are in the public interest.

Social mobilisation is essential for addressing the risk factors of NCDs. People must be encouraged to take ownership of their behaviours and choices and the environment should be supportive and enable people to make healthy choices. There should be a process of enabling people to increase their control over the determinants of health and thereby improve their health. CSOs can help people organise and empower people with knowledge to make informed decisions. Awareness campaigns and community education are necessary to improve health literacy and keep people informed of healthier options and / or dangerous practices.

#### **5.1.3 Addressing the main risk factors for NCDs through Interventions with Individuals.**

Identifying individuals at risk is an important strategy to prevent NCDs. Adults at risk can be accessed through clinics, social development pay points and other government service points and children can be also accessed through schools. Utilising behaviour change techniques such as motivational interviewing can result in significant reduction in the need for health resources and reduce health care costs. Moreover the HIV Counselling and Testing (HCT) campaign which has already tested over 13 million people for HIV offers an excellent opportunity for screening for NCDs. Health workers conducting testing must routinely offer testing for non-communicable diseases as well as for HIV and TB. Appropriate referral where an individual is screened positive is then critical in order to get a diagnosis and treatment should it be required.

Moreover, changed lifestyles for people already diagnosed with NCDs as well as strict adherence to medical interventions are important for secondary prevention of NCDs and increasing life expectancy. Health workers, family members, support group members and others must all assist in ensuring

that people with chronic diseases remain healthy. Those supporting people with chronic diseases must for example know what diets are required to prevent the exacerbation of that particular disease, that tobacco and alcohol are likely to aggravate the problem, that exercise is needed and they must help to support the individual in adherence to medication.

While lifestyle modification can substantially reduce the level of risk of prematurely developing end organ damage, it is not sufficient without introducing drug therapy to further control the impact of risk factors on end organs such as the heart, the brain or the kidneys. This is particularly important in people who have multiple risk factors, as the overall cardiovascular risk increases exponentially in people with more than one risk factor. It is therefore most cost effective to institute the assessment of the overall cardiovascular risk particularly in the primary health care setting, in order to identify those people who will benefit most by receiving appropriate drugs to control their risk factors.

WHO has suggested that people with a 10 year cardiovascular risk of 30 percent or higher require drug treatment along with people who have had a CVD event or have very high levels of individual risk factors.

Drugs recommended for use, particularly at primary care level, must be those for which significant evidence exists for protecting people against developing premature end organ damage. Such drugs are best identified through evidence based clinical guidelines and shown to be cost effective. More costly, but effective drugs for patients with more complex conditions should be initiated at the secondary or tertiary level of care.

## 5.2 Control of NCDs through Health Systems Strengthening

A Health System is the “structured and interrelated set of all actors and institutions contributing to health improvement”. Effective NCD prevention and control needs careful liaison and interaction between different levels of health care i.e. primary, secondary, and tertiary levels and with central and specialised hospitals; including appropriate promotive, preventative, curative and palliative services at all levels.

Health care is a continuum between levels rather than distinct systems. Successful health care also needs effective cohesion between the different elements that make up health services and a comprehensive range of services within levels of care. In line with the re-engineering of primary health care, the effective functioning of the primary health care system is essential to provide support for the biomedical and behavioural interventions required to address NCDs.

Given the importance of care at the primary level this strategy concentrates primarily on this level. Effective linkages between community-based services, primary health care facilities via the district health system and hospital services are essential. Health systems strengthening is both a prevention and control mechanism for reducing NCDs.

The Innovative Care for Chronic Conditions framework of the World Health Organisation (Figure 12) shows the range of actors needed for good chronic care. The Figure illustrates that chronic care is not reliant merely on good clinical diagnosis and interventions – though this is very important – but on a planning and support environment that understands the difficulties of long term care and the needs for partnerships between health personnel and community and particularly with patients and families.

For example prescribing medication for a chronic disease is meaningless if the supply of medicines is not stable; if the individual does not take their medication regularly; if laboratory assistance is not available to test samples when needed or even if the person takes the medicines given to them as prescribed but simultaneously has poor diet, lack of exercise and uses tobacco and excess alcohol.

## Innovative Care for Chronic Conditions Framework



Figure 12 Innovative care for chronic Conditions. Building Blocks for Action

### 5.2.1 Using a Health System Framework to Strengthen Response to NCDs

The most effective interventions for improvements in chronic disease care include the combination of multi-pronged strategies. This is encompassed within the principles of the Integrated Chronic Disease Management Model (ICDM) which will be incrementally implemented in districts. This model draws on the 6 key Alma-Ata principles of primary health care, that is equity, universal coverage, appropriate use of technology, health promotion, community participation and intersectoral collaboration.

This model is also founded on the principle that chronic diseases are not non-communicable diseases alone but that communicable diseases, notably HIV and Tuberculosis, are also chronic conditions. Given high co-morbidities between chronic communicable and non-communicable diseases as well as the fact that other than direct clinical management effective chronic diseases management irrespective of aetiology must follow highly similar paths, all chronic disease management should be integrated where possible.

### Guiding principles for the ICDM

The ICDM is informed and guided by the principles of the WHO-Innovative Care for Chronic Conditions (ICCC). These principles as applied to the ICDM are:

1. Evidence Based Decision making
2. Population focus
3. Prevention Focus
4. Quality Focus
5. Integration
6. Flexibility and adaptability

### Strategic objectives of the ICDM

1. Create a positive policy environment for managing chronic conditions by:
  - strengthening programmatic policy integration;
  - strengthening partnerships and external collaboration; and
  - supporting legislative environment
2. Enhance and mobilise community resources for chronic conditions by:
  - raising awareness and reducing stigma; and
  - mobilising community resources
3. Re-orientate the health service delivery for improved chronic patient outcomes by:
  - enhancing the skills of human resources;
  - increasing the operational efficiency of the PHC facility;
  - promoting self-management and prevention;
  - strengthening referral networks to hospitals and community;
  - effective use of health information systems; and
  - introducing innovative technology- mobile health

ICDM operational model

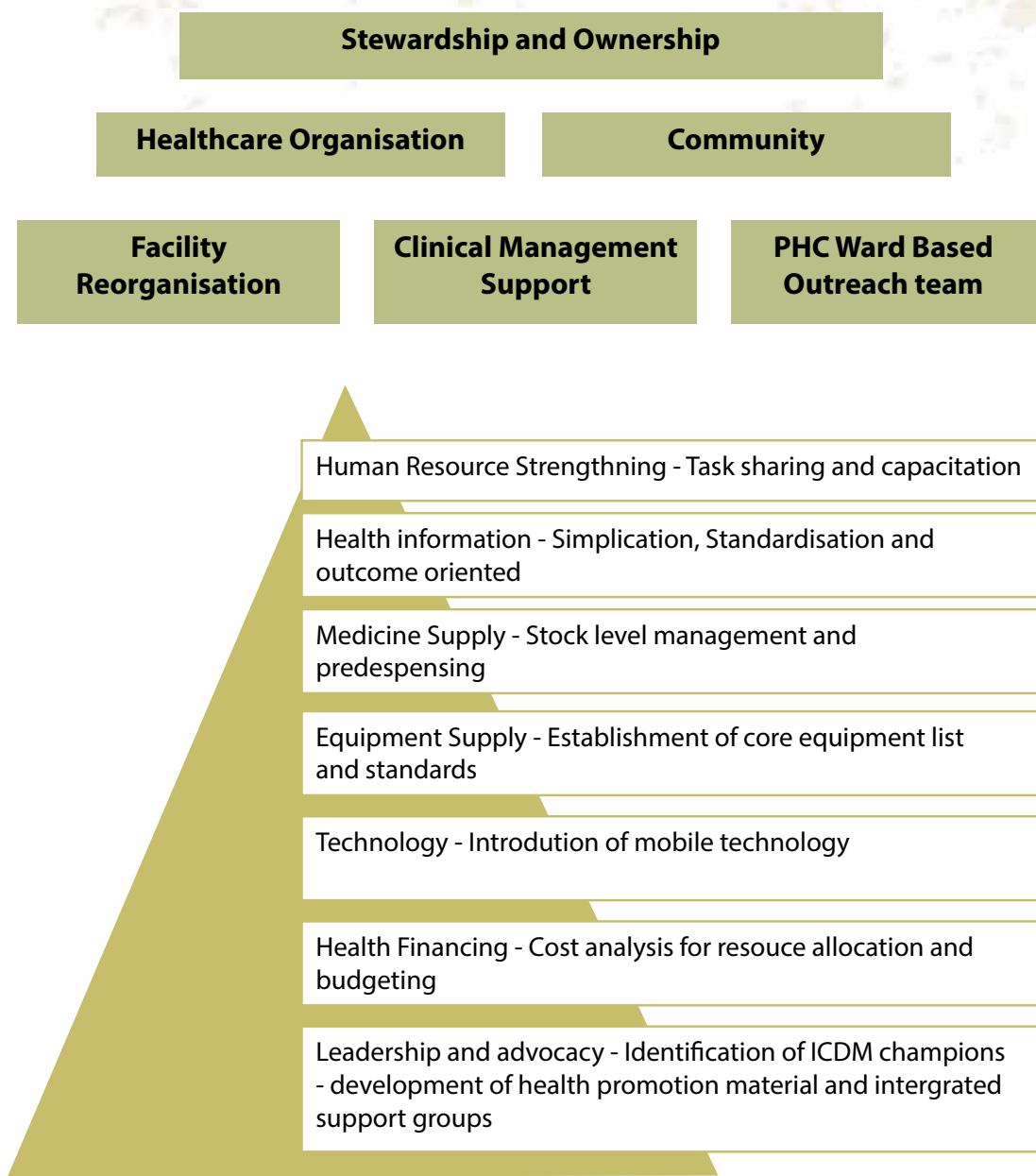


Figure 13: ICDM Model

### 5.2.2 The Primary Health Care Approach to Chronic care

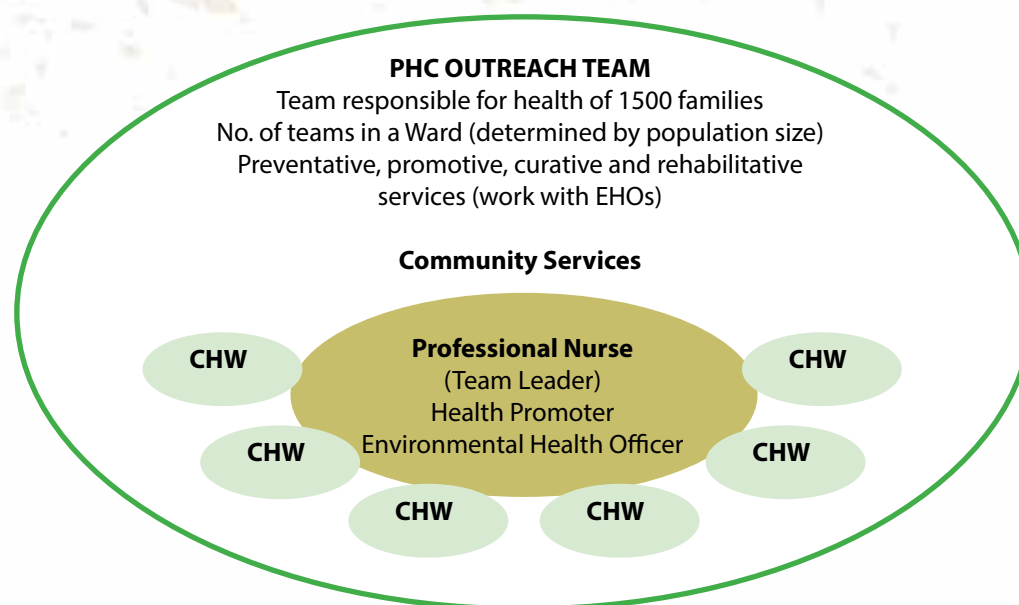


Figure 14

Successful implementation of the strategy for prevention and control of chronic conditions is dependent on the primary healthcare re-engineering process. The two diagrams below provide the links for chronic care with the model to be used for the primary health re-engineering process.

An important component of re-engineering of primary health care will be the establishment of primary health care outreach teams in every community ward in South Africa. Community health workers, who will visit households directly, will inform community members of the importance of healthy lifestyles and what constitutes healthy living. People identified as high risk will be referred for a full assessment at their local clinic or health centre. Community health workers will also support family members of diagnosed patients with chronic diseases in promoting good health through lifestyle modification and medication adherence.

A health promoter will form part of the ward team to support the community health workers and conduct health promotion activities within communities. Patients with advanced progressive illness will receive palliative care in the appropriate setting, including palliative home care.

Many people on long term care need adherence counselling and education to facilitate self-management through support groups, home based services, reminders to take their medicines, reminders to come for reviews, assistance with nutritious foods and counselling to curb smoking and alcohol intake. Long term care also requires appropriate equipment (technologies), drugs, medical products (supplies) and tools. Ideally patients with chronic NCDs should be capable of managing their own conditions.

However, the ICDM uses the PHC outreach team to provide “assisted self-management”. For effective health system functioning, effective and appropriate clinical and primary care supervision must be provided by the District Management Teams using the correct instruments including the collection of essential health indicators through the District Health Information System.

Health systems break down when one element of the system is dysfunctional. This is why it is very important to understand the whole system and the elements that contribute to it and make sure that each aspect is in good working order.

Effective clinical governance and a patient centred approach are critical. This requires staff with effective communication skills, appropriate clinical assessment of the patient; accurate diagnosis, evidence based management/clinical interventions and monitoring of the desired outcome by collecting essential data that will feed into service improvements.

### **5.2.3 Essential NCD Medicines and basic technologies to treat major NCDs**

In addition to lifestyle modification the mainstay of NCD care involves the use of medicine for which evidence of effectiveness is widely accepted and equipment and technologies to measure the degree of treatment effectiveness at all levels of the health care system.

Drugs recommended for use, particularly at primary care level, must be those for which significant evidence exists for protecting people against developing premature end organ damage. Such drugs are best identified through evidence based clinical guidelines and shown to be cost effective.

More costly, but effective drugs for patients with more complex conditions should be initiated at the secondary or tertiary level of care. Finally, patients with conditions where curative treatment is no longer an option need to have access to drugs that will ensure optimal relief of suffering until the time of their death

The availability of the Essential Drug List for primary care health care with generic essential medications is central. Channels of communication between the members of the essential drug list committees and the professional associations of key NCD conditions must be established to ensure that professional clinical guidelines of the latter groups are kept in line with the essential drug list items to ensure cost-effective, up to date evidence based medicine for NCDs in South Africa. Record keeping of drug availability and utilisation patterns according to individual NCD conditions must be established.

The challenge at primary health care level is to ensure an effective drug distribution system that regularly delivers the prescribed drugs to patients without their daily lives being much disrupted.

This necessitates the avoidance of drug outages and community outreach processes that reduce patient visits to primary health centres purely to collect medication. Additionally, treatment adherence must be encouraged through support groups and on-going patient education.

As patients with cardiovascular diseases, diabetes, chronic respiratory conditions, cancer, mental disorder, oral diseases, eye disease, kidney disease and muscular-skeletal conditions will frequently be referred from primary care services to secondary, tertiary and academic health services and then back again to primary care services adequate referral systems and drug distribution systems between the levels of patient care must be developed and ensured

The minimal equipment and technologies required at primary health care level include blood pressure measurement devices that are regularly serviced and standardised, a height meter and a weighing scale that is also maintained. Blood sugar and blood cholesterol measurement devices with the necessary strips and laboratory services must be available, as well as urine strips to measure urinary albumin. Again the necessary procedures for standardisation of equipment and test must be available.

#### 5.2.4 Continuum of Care

##### 5.2.4 1. Rehabilitation

Rehabilitation is an integral component in the continuum of care to patients who experience impaired sensory, cognitive and/or body functioning due to non-communicable diseases, in particular stroke, diabetes and cardiovascular diseases. People with mental disabilities also require rehabilitation.

Rehabilitation services must occur within a multi-disciplinary approach. A variety of professional staff should contribute to the overall management of the patient, with the patient and family member and/or caregiver being integral to the programme.

A patient/client who requires rehabilitation should be identified and referred early in order to derive maximum benefit from therapeutic interventions. Early intervention is also important in preventing complications that might arise as a result of disuse or wrong use of certain parts of the body.

Rehabilitation will focus on empowering patients through detailed rehabilitation plans, home programmes as well as the provision of technical aids and devices (e.g. wheelchairs, low vision aids, white canes) when required.

##### 5.2.4.2 Palliative Care

Palliative care is an essential component of care commencing at the point of diagnosis of a life threatening disease. Patients with incurable conditions frequently suffer great discomfort and pain which if managed appropriately will prevent continuous patient admissions which are expensive to the State and the patient, and is disruptive to the lives of patients and their families.

Palliative care requires intersectoral action to manage the multiple needs of the patient and should occur at all levels of health care. A critical component is the effective management of pain, mainly with morphine, which must be more accessible to all patients at a local level.

#### 5.3 Human resources for NCDs

The Human Resource Strategy for the Health Sector launched in 2011 documents the severe shortage of human resources to meet current health needs and even more importantly how this will worsen without training of additional health workers<sup>33</sup>. In particular there is a gross shortage of doctors, pharmacists, nurses, psychologists, rehabilitation therapists and oral hygienists and dental therapists in South Africa.

This will undoubtedly also affect the provision of services for prevention and control of NCDs. It is important to incorporate training on prevention and control of NCDs and training on care of people living with NCDs including palliative care for all health care workers, professional and non-professional. In addition there are specific human resources that are needed to address NCDs in particular which need to be increased – especially to meet the needs of the poor and people in rural areas.

The epidemiological trends of NCDs have several implications for human resource development and planning<sup>34</sup>. A detailed human resource strategy including taking into consideration Re-engineering of Primary Health Care and based on the changing needs created by changing NCD patterns, will be developed.



# **CHAPTER 6: SURVEILLANCE/MONITORING, EVALUATION AND RESEARCH**



## Chapter 6: Surveillance/Monitoring, Evaluation and Research

### 6.1 Surveillance of NCDs and their determinants<sup>35</sup>

The main purpose of disease surveillance is to observe disease trends so as to identify and minimise the harm caused by an outbreak or epidemic and to assess the effectiveness of current health services. Surveillance systems for highly infectious diseases are well established.

Outbreaks require an immediate response to identify the source and take appropriate public health action. Individual case identification and rapid response are essential to prevent the spread of the disease. In contrast, epidemics require a more programmatic approach for surveillance including reliable monitoring of the extent of epidemic, their risk factors and the interventions to control the disease.

The surveillance system needs to inform the public health response. With the exception of cancer registers for monitoring the incidence of cancer, there has been little consensus on surveillance systems for NCDs even though the importance of surveillance to NCD prevention and control is critical.

Nonetheless, South Africa has many elements that can be developed further into a strategic surveillance system for NCDs. The South African Demographic and Health Survey (SADHS) included information on self-reported chronic conditions as well as their risk factors. Importantly it measured blood pressure, anthropometry and lung function, providing reliable information about population health.

The survey was designed to use hypertension and lung disease as sentinel conditions for assessing chronic diseases and their management. Moreover, the South African National Health and Nutrition Examination Survey is collecting critical data on population health and the risk factors for NCDs.

Notwithstanding, a comprehensive surveillance system needs to be developed for NCDs. It must include monitoring the exposures that lead to NCDs (unhealthy lifestyles and risk factors including among young people), monitoring health

outcomes (illness and cause specific mortality) as well as the health system response (capacity, access to interventions and quality of interventions). At a minimum surveillance information must be established to establish baselines and monitor progress with respect to the targets set in the South African Declaration for Prevention and Control of Non-communicable diseases (See Appendix 1)

Surveillance data for NCD will come from a combination of the District Health Information System data and specific surveys/research set up for this purpose as well as from Statistics South Africa (Stats SA).

### 6.2 Health systems monitoring and evaluation

The extent to which positive health outcomes are achieved for NCDs will depend to a large extent on the effectiveness and efficiency of the health system. It is critical that monitoring systems are established to assess the quality and extent to which the health services are implementing policy and the norms and standards that have been set.

Where deficiencies are detected action plans are required to rectify the faults. Where health systems are being implemented as planned but health outcomes are still not improving, in-depth evaluations must be done to establish the reasons for this and where necessary reconfigure the health systems themselves to effect better outcomes.

### 6.3 How will the NCD summit targets be monitored?

In order to monitor the 10 targets accepted at the SA NCD summit information must be collected from a variety of sources including Statistics South Africa, South African National Health and Nutrition Examination Survey (SANHANES), Demographic and Health Survey, District health information System, National cancer registry, specially directed surveys and the Chronic Disease Register. Mechanisms for measuring health systems implementation and successes should be established.

## 6.4 Research

NCD policies and programmes need to be based on sound scientific evidence generated through research. Interventions that could reduce the burden of NCDs are available – but health systems research is needed to identify the barriers to their effective implementation and effective strategies to scale up such interventions. In addition, research is needed to support and evaluate the effective implementation of population wide interventions.

Research is essential to understand and to demonstrate how NCD interventions can be implemented effectively in resource constrained settings, especially when there are multiple competing health problems. Investment in health services and other implementation research can improve the effectiveness of programmes and save resources.

The Research agenda arising from the National Health Research Summit (2011) will incorporate NCDs and will assist in identifying priority research needed for NCDs.

### Priority research for NCDs

1. Develop and evaluate models of primary health care - a model for integrated care is needed, with identification of the factors that will enable its implementation at scale. This should make use of lessons learnt from HIV care. Important issues that need to be researched include task shifting, methods for enhancing adherence and the role of e-health.
2. Inter-sectoral and multidisciplinary research to understand and influence the macro-economic and social determinants of NCDs and exposure to NCD risk factors. This is important to guide inter-sectoral action at district level.
3. Develop and evaluate school related interventions to promote healthy lifestyles. It is particularly important to find effective methods to influence future generations.
4. Identify best-buys for prevention, health promotion and treatment and care. The evidence base needs to be synthesised and evaluated in the South African context. There is an urgent need to review policies that

will prevent or exacerbate NCDs, to monitor progress and effectiveness of these policies, and identify gaps in the policies to promote healthy lifestyles and prevent NCDs.

5. Implementation research is essential with rigorous evaluation of roll-out of interventions.
6. Innovative research to develop low-cost screening and intervention approaches as well as medicines and vaccines is needed.

**CHAPTER 7:  
STRATEGIES AND ACTION PLAN  
FOR MEETING SOUTH AFRICA'S  
NCD TARGETS**



*TO MUCH SALT IS NOT GOOD FOR YOU*

## Chapter 7 Strategies and Action plan for meeting South Africa's NCD Targets

As far as possible the following (inter-related) strategies and the objectives to achieve the required goals are based on “best buys” for achieving improved NCD status in South Africa. They also relate directly to the targets set for NCDs at the SA NCD summit.

### *Strategy 1: Prevent NCDs and promote health and wellness at population, community and individual levels.*

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Establish an inter-sectoral structure to reduce NCDs and for planning and monitoring.	Targets 1-10	Intersectoral structure established.	Examine best practice for intersectoral collaboration and establish structure Engage relevant stakeholders, government departments and NGOs	Nil	Structure in place with clear terms of reference.	Functional and ongoing intersectoral structure for prevention of NCDs	Presence of intersectoral structure
Develop an integrated and intersectoral plan for a co-ordinated response to prevention of NCDs	Targets 1-10	An integrated plan with objectives for all sectors which are being implemented and monitored.	Develop action plans for each sector and integrate them. Develop mechanisms for monitoring progress Align this initiative to the Department of Health's Health Promotion Policy	Nil	Joint strategy to prevent NCDs and action plans developed	Intersectoral plan being implemented and monitored by intersectoral structure.	Plans available with indicators for measurement
Control tobacco use	Reduce tobacco use by 20% by 2020;	Tobacco use in SA	Finalise regulations on display at point of sale, smoke free public areas and pictorial health messaging & warning on packages;	23.4% of adults (36.7% of men and 10.3% of women who smoke)	Reduction of 5%	Reduction of 10%	SANHANES GATS

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Reduce alcohol consumption	Reduce by 20% the relative per capita consumption of alcohol by 2020;	Per capita consumption of alcohol	Implement the strategic plan accepted by Cabinet to reduce substance abuse. Introduce legislation to parliament for banning alcohol advertising. Revise regulations on warning labels. Increase community and social mobilisation to prevent alcohol abuse. Strengthen intersectoral collaboration	20l/adult	No increase	19l/adult	Trade and Industry statistics MRC
Reduce % of salt in processed foods.	Reduce mean population intake of salt to <5 grams per day by 2020;	Mean population intake of salt.	Pass regulations on salt content in processed foods. Monitor salt content in regulated food. Introduce a public campaign to reduce salt intake.	Not available (A WC study found salt intake to be 7.8 grams per day in black people, 8.5 grams per day in coloured population and 9.8 grams per day in whites.	No increase	Mean population intake of 7 grams per day	Research study to measure salt intake
Reduce prevalence of overweight and obese people.	Reduce the percentage of people who are obese and/or overweight by 10% by 2020;	Obesity and overweight levels.	Engage with relevant government departments including agriculture, trade and industry and treasury to increase the accessibility and availability of healthy foods. Run public campaigns to improve eating habits.	As per 98 for different ages.	No increase	3% decrease in all age groups in Figure 9	SANHANES Youth Risk Behaviour Survey

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Reduce cervical cancer mortality	Every women with sexually transmitted diseases to be screened for cervical cancer soon after/at diagnosis and every 5 years, otherwise every women to have 3 screens in a lifetime or at the point of diagnosis if HIV positive	Number of women with sexually transmitted diseases screened for cervical cancer at diagnosis and every 5 years and number of other women screened every 10 years.	Train health workers in clinics, including HIV clinics, to screen for cervical cancer. Improve sample and laboratory efficiency to attain accurate and quick turnaround. Incorporate screening into screening for HIV and AIDS Increase public campaigns.	51% of women over 30 attending public sector clinics screened. Policy of priority to women with sexually transmitted diseases has only just been put into operation so no data	55% of women over 30 attending public sector clinics screened. 55% of women with STIs screened soon after/at diagnosis and at 5 year intervals	65%of women over 30 attending public sector clinics screened. 65% of women with STIs screened soon after/at diagnosis and at 5 year intervals	DHIS
Reduce mortality through introduction of the Human Papilloma Virus Vaccine	Reduce by at least 25% the relative premature mortality (under 60 years of age) from Non-communicable Diseases by 2020;	Number of pre-sexual girls given the HPV vaccine	Introduce the HPV vaccine through the school health programme beginning with quintile 1 schools	Nil	All age appropriate girls in quintile 1 schools	All age appropriate girls in quintile 2 schools	Monitoring of school health services
Reduce morbidity and mortality through increased screening and treatment for hypertension, diabetes and asthma	Increase the percentage of people controlled for hypertension, diabetes and asthma by 30%  Reduce the prevalence of people with raised blood pressure by 20% by 2020	Number of people screened and treatedfor hypertension, diabetes and asthma	Increase screening of people who are "at risk" in primary care. Train health workers to identify people at risk and to conduct screening Increase numbers of at risk patients screened for hypertension and diabetes within HCT campaign. Increase screening within school health services.	To be established through a survey.	Numbers screened increased by 5% Numbers screened as part of HCT increased by 30%	Numbers screened increased by10%	Specific survey

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Reduce NCD mortality through prevention and promotion.	Reduce by at least 25% the relative premature mortality (under 60 years of age) from Non-communicable Diseases by 2020;	NCD mortality as measured by Stats SA.	As above Provide effective treatment for people diagnosed with NCDs Provide interventions to assist people diagnosed with NCDs to change their lifestyles to promote their health	Current mortality from NCDs Heart disease 8.7% Stroke 4.1% Cancer 5.0% Respiratory diseases (non-infectious) 3.3% Diabetes 3.3% (% under 60 to be established from Stats SA)	No increase in premature mortality from NCDs	Reduction by 5% in premature mortality from NCDs	Statistics South Africa MRC Burden of Disease Studies MRC Rapid Mortality Surveillance

**Strategy 2: Improve control of NCDs through health systems strengthening and reform.**

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Integrate NCDs into:-Primary health care package,  -re-engineering of PHC,  - Human Resource development strategies and interventions.	All 10 NCD targets	NCDs are fully included in the Primary health care package	Provide relevant input and monitor that NCDs are fully included in the PHC package and provided within PHC.	PHC package being finalised	NCDs fully included in PHC package	NCDs fully included in PHC package	NCDs fully included in PHC package. Survey to assess whether NCDs are being provided as part of PHC package
		NCDs are fully included in the terms of reference for CHWs. Number of CHWs providing NCD services	Provide relevant input and monitor to ensure that NCDs are fully included in work of CHWs and health promoters.	NCDs included in Phase 2 of CHW training	All CHWs trained in NCD issues	All CHWs trained in NCD issues	Survey to establish whether NCDs are being included in the work of the CHWs
		Human resources for NCDs are increased.	Provide relevant input and monitor to ensure that NCDs are fully included in human resource development initiatives, including training of additional health workers to deal with the clinical care of NCDs and improving communication skills of NCD health workers..	As per HR plan <sup>36</sup>	Increase specialist health workers dealing with NCDs increased by 5%	Increase in specialist health workers dealing with NCDs increased by 10%	HPCSA statistics

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Improve health systems to attain higher levels of control for hypertension, diabetes and asthma	<p>Increase the percentage of people controlled for hypertension, diabetes and asthma by 30%.</p> <p>Reduce by at least 25% the relative premature mortality (under 60 years of age) from Non-communicable Diseases</p>	Increased control of hypertension, diabetes and asthma of people already diagnosed with these diseases.	<p>Implement integrated chronic care model and assess the feasibility of integration of all chronic diseases in 3 districts and roll this out (should the model prove feasible). Implement the long-term care model in all districts.</p> <p>Train CHWs in adherence counselling, monitoring, diagnoses of high CVD risk people and referring people with NCDs.</p>	Chronic care model in 3 sub-districts	Chronic care model in at least 10 full districts	[Dependent on evaluation of the model]	Specific research and evaluation
Prevent blindness through increase in cataract surgery		Cataract surgery rates	<p>Establish scientific evidence for most cost effective and rapid cataract surgery.</p> <p>Increase surgeries through high impact but sustainable approaches</p>	1000 operations per million population	1500 operations per million population	1700 operations per million population	Template filled in by provinces from hospital data.
Reduce morbidity from mental disorder	Increase the number of people screened and treated for mental disorder by 30% by 2030.	Mental health caseload	<p>Conduct training of health workers in primary health care to screen for mental disorder and substance abuse.</p> <p>Increase human resources for mental health</p>	0.85 mental health caseload	10% increase in caseload	15% increase in caseload	DHIS

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Increase access to essential drugs and equipment	Reduce by at least 25% the relative premature mortality (under 60 years of age) from Non-communicable Diseases. Increase the percentage of people controlled for hypertension, diabetes and asthma by 30% by 2020 in sentinel sites; and Reduce the prevalence of people with raised blood pressure by 20% by 2020 (through lifestyle and medication	Availability of essential drugs and equipment.	Drug protocols as per clinical guidelines. Increase availability and procurement of essential drugs including morphine Use of clinical guidelines.	Current stock-outs and essential equipment	10% decrease in drug stock outs and 90% availability of essential equipment.	15% decrease in stock-outs and 90% availability of essential equipment.	Supervision manual report

### Strategy 3: Monitor NCDs and their main risk factors and conduct innovative research.

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
Establish a comprehensive surveillance mechanism for NCDs, health information systems and dissemination processes to assist policy, planning, management and evaluation of NCD prevention and control	All 10 NCD targets	Comprehensive surveillance mechanism established and implemented in both the public and private health sectors	Work with relevant partners, including the Medical Research Council and the Human Sciences Research Council to establish comprehensive surveillance systems. Strengthen research capacity to conduct surveillance.	Nil	Comprehensive surveillance mechanism and routine monitoring system for NCDs established by March 2014, and integrated into existing systems	Comprehensive surveillance mechanism and routine monitoring system for NCDs generate reliable data on: exposure to risk factors; management and control of NCDs; outcomes	Internationally accepted NCD surveillance system in place.
Ensure baseline information is available for each summit target.	All 10 NCD targets accurately measured	Accurate baseline information	Facilitate inclusion of relevant data collection in SANHANES, DHIS, MRC surveys, chronic disease register, National cancer register.	Accuracy of information to be verified..	Baseline information available for all summit targets	Progress Report on the implementation of Summit Target produced	SANHANES, DHIS, MRC surveys, Chronic disease register, National cancer register
Work with the National Health Research Committee to generate research to inform NCD policies and programmes based on sound scientific evidence.	All 10 summit targets.	Innovative research results available that inform rational NCD policy and programmes	<p>Ensure that NCD targets are included as Health Research priorities.</p> <p>Encourage intersectoral and multidisciplinary research to understand and influence the macroeconomic and social determinants of NCDs and exposure to NCD risk factors.</p> <p>Policy review to monitor progress and identify gaps in the policies to promote healthy lifestyles and prevent NCDs.</p>	Nil	At least two research projects on the list of activities in progress	Results of a least 3 research projects on the list of activities.	Specific research result on NCD targets.

Objective	Goal in terms of NCD summit target	Indicator	Activities	Baseline (current)	Target for 2015	Target for 2017	Means of verification
			<p>Oversee cost-effectiveness evaluation of interventions and platforms in the South African setting.</p> <p>Develop and evaluate interventions that change behaviours in schools, communities and work place settings.</p> <p>Develop and evaluate healthy lifestyle programmes and social marketing strategies to promote improved diet, physical activity and non-smoking.</p>				

## Appendix 1

### SOUTH AFRICAN DECLARATION ON THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

We, the participants in the South African Summit on the Prevention and Control of Non-Communicable diseases gathered in Gauteng from 12-13 September 2011.

#### *Recognising that: -*

Health is a key development goal;

South Africa principally suffers from a quadruple burden of disease: from HIV and AIDS and TB, high levels of Maternal and Child mortality; Intentional and non-intentional injuries; and Non-communicable diseases;

Achieving a long and healthy life for all requires concerted interventions in each of these areas best achieved through an inter-sectoral collaboration based on sound evidence.

A shift towards a “whole of government” and a “whole of society” approach is imperative in dealing with Non-communicable Diseases given Non-communicable Diseases are caused or strongly influenced by behavioural, environmental, social and economic factors.

All South Africans have the right to the enjoyment of the highest attainable standards of physical and mental health and acknowledge that this cannot be achieved without increased measures and services at national, provincial and district levels to prevent and control Non-communicable Diseases.

In order to achieve equitable, efficient and quality health services South Africa is in the process of implementing a National Health Insurance System and that prevention, early detection and universal treatment of Non-communicable Diseases will form an integral part of this system.

#### *Noting that: -*

Non-communicable diseases impact on every strata of South African society; men and women, all races, economic groups, urban and rural populations and age groups - including children, adolescents, adults and older persons.

Significant mortality and burden of disease is attributable to cardiovascular diseases, diabetes, cancers, chronic respiratory diseases, mental disorders, oral diseases, eye diseases, muscular skeletal and other non-communicable conditions.

Non-communicable Diseases are the leading cause(s) of preventable morbidity and disability, and currently cause over 60% of global deaths, 80% of which occur in developing countries and that by 2030, Non-communicable Diseases are estimated to contribute to 75% of global deaths. Non-communicable diseases are also responsible for high disability adjusted life years.

In Africa, Non-communicable Diseases are anticipated to overtake mortality from communicable, maternal, perinatal and nutritional diseases by 2030. In South Africa (as reported in 2000) Non-communicable diseases were responsible for around 40% of all deaths (excluding injury) and around 35% of the burden of disease.

People living with HIV and AIDS are at higher risk for developing Non-communicable Diseases including cancers, cardio-vascular, mental disorder, diabetes and other Non-communicable Diseases.

Maternal and child health are inextricably linked with Non-communicable Diseases and their risk factors and that prenatal malnutrition and low birth weight create a predisposition for obesity, high blood pressure, heart disease and diabetes later in life and Non-communicable Diseases in pregnancy create risks for both mother and child.

There are around 17 million visits at health centres per annum for hypertension and diabetes in South Africa, resulting in significant health care costs and use of human resources.

However more than half of people who have these conditions in South Africa are not aware of their condition and do not receive health care; Improved primary health care would reduce visits to secondary and tertiary health care facilities.

South Africa has adopted Tobacco Control measures, but needs to address other major risk factors for non-communicable diseases.

Non-communicable diseases have economic consequences on individuals, households and society.

**Affirm that: -**

The major Non-communicable Diseases are linked to common risk factors, namely unhealthy diets (high intake of fats, salt, sugar etc), physical inactivity, harmful use of alcohol and tobacco use. and in some cases to infections.

Unequal development including poverty and health illiteracy is strongly associated with increased NCD morbidity and mortality.

**Realise that: -**

The common risk factors and the systems put in place to deal with the conditions in which people live are shaped by social, cultural, behavioural, environmental and economic determinants.

Primary health care is the foundation of the health care system.

There is a the need to fully integrate non-communicable diseases into the re-engineering of Primary Health care in South Africa with the view to increasing community based prevention, screening, self management, care (including rehabilitation and palliative care) and referral according to the WHO innovative model for chronic care.

**Informed by: -**

Resolutions WHA53.17 (May 2000) on the Prevention and Control of Non-Communicable Diseases and WHA61.14 (May 2008) on Prevention and Control of Non-Communicable Diseases: Implementation of the Global Strategy

The report of the WHO Commission on Social Determinants of Health (2008);

The Ouagadougou Declaration on Primary Health Care and Health Systems in Africa: Achieving better health for Africa in the new millennium (2008);

The Libreville Declaration on Health and Environment in Africa (2008);

The Nairobi Call to Action (2009);

The Mauritius Call for Action (2009);

WHO Framework Convention on Tobacco Control (2003);

2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non Communicable Diseases;

The WHO Global Strategy to Reduce the Harmful Use of Alcohol (2010);

Global Strategy on Diet, Physical Activity and Health (2004) and other relevant international strategies to address Non-communicable Diseases;

WHO Set of recommendations on the marketing of foods and non-alcoholic beverages to children (2010)

Resolution WHA 55.23 on Diet, Physical Activity and Health (2002)

WHO Global Recommendations on physical activity for health (2010). United Nations Convention on the Rights of Persons with Disabilities, 2008

Resolutions WHA59.25 Prevention of avoidable blindness and visual impairment (2006) and WHA62.1 Prevention of avoidable blindness and visual impairment, endorsing the action plan for the prevention of avoidable blindness and visual impairment (2009)

WHO Vision 20/20 Prevention of Blindness Programme (2000)

Vision 2020 The Right to Sight: Global Initiative for the elimination of avoidable blindness Action Plan 2006 – 2011

Action Plan for the prevention of avoidable blindness and visual impairment 2009 - 2013

Package of Essential Non - Communicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings (2010)

WHO Strategy on Integrated Palliative Care.

Madrid International plan of Action on Ageing (2002).

WHO Framework for Action. Everybody's business: Strengthening health systems to improve health outcomes (2007)

### **Hereby commit to:-**

Using the outputs from the summit to develop an integrated strategy on the Prevention and Control of NCDs.

Creating an intersectoral stakeholder forum similar to SANAC to implement this strategy.

Fostering patient-centred health care in line with the SA Patients Rights Charter incorporating respect, involvement in policy, choice and empowerment, access and support and information.

Working in partnership with all relevant stakeholders including different government departments, non-governmental organisations, user and survivor groups, academics and content experts as well as with private sector stakeholders that commit themselves to reduce Non-communicable Diseases and do not have a conflict of interest, to reduce the incidence and mortality from non-communicable diseases;

Introducing evidence based behavioural interventions and campaigns through the media and other information and education mechanisms and increase health literacy amongst South African consumers to reduce the main modifiable risk factors for non-communicable diseases;

Developing multi-sectoral public policies that create sustainable health promoting environments that enable individuals, families and communities to make healthy choices and lead healthy lives;

Developing and implementing policies, strategies, plans and evidence based guidelines at national, provincial and district levels in and across government departments to prevent and control Non-communicable Diseases through preventive, health promoting, curative, rehabilitative and palliative services;

Strengthening the national health system as the basis of a comprehensive and sustainable approach to equitable health outcomes for Non-communicable Diseases ensuring quality care across the life cycle;

Introducing legislation and regulation to reduce the modifiable risk factors for Non-communicable Diseases.

Reducing costs and increase the efficiency of health interventions, including making medicines, devices and vaccines affordable, in order to provide essential health services, including preventive services, for Non-communicable Diseases to all;

Increasing prevention, screening and control programmes for Non-communicable Diseases and promoting the integration of these with those provided for chronic communicable health conditions and maternal and child health services;

Establishing comprehensive surveillance mechanisms, health information systems and dissemination processes to assist policy, planning, management and evaluation of NCD prevention and control;

Developing, encouraging and supporting research and innovation in Non-communicable Diseases to improve understanding of the burden, determinants, causes and consequences; prevention, screening and control of Non-communicable Diseases in all age groups;

Implementing the WHO Framework Convention on Tobacco Control, the Action Plan for the Global Strategy for the Prevention and Control of Non-communicable Diseases; the WHO Global Strategy to Reduce the Harmful Use of Alcohol, and the Global Strategy on Diet, Physical Activity and Health through intersectoral action.

Increasing public awareness of the early signs and symptoms of Non-communicable Diseases in order to promote timely health seeking behaviour.

Improving the quality of food available in South Africa by means of intersectoral collaborations.

Developing and strengthening human capacity for chronic disease research and monitoring.

Increasing and developing human resources for detection, management, prevention and control of non-communicable diseases and build links with traditional and complementary healers.

**And consequently to:**

- 1) Reduce by at least 25% the relative premature mortality (under 60 years of age) from Non-communicable Diseases by 2020;
- 2) Reduce by 20% tobacco use by 2020;
- 3) Reduce by 20% the relative per capita consumption of alcohol by 2020;
- 4) Reduce mean population intake of salt to <5 grams per day by 2020;
- 5) Reduce by 10% the percentage of people who are obese and/or overweight by 2020;
- 6) Increase the prevalence of physical activity (defined as 150 minutes of moderate-intensity physical activity per week, or equivalent) by 10%
- 7) Reduce the prevalence of people with raised blood pressure by 20% by 2020 (through lifestyle and medication).
- 8) Every women with sexually transmitted diseases to be screened for cervical cancer every 5 years, otherwise every women to have 3 screens in a lifetime (and as per policy for women who are HIV/AIDS positive).
- 9) Increase the percentage of people controlled for hypertension, diabetes and asthma by 30% by 2020 in sentinel sites; and
- 10) Increase the number of people screened and treated for mental disorder by 30% by 2030.

## Appendix 2

### Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases

**General Assembly 16 September 2011. Original: English  
Sixty-sixth session**

We, Heads of State and Government and representatives of States and Governments, assembled at the United Nations from 19 to 20 September 2011, to address the prevention and control of non-communicable diseases worldwide, with a particular focus on developmental and other challenges and social and economic impacts, particularly for developing countries,

1. Acknowledge that the global burden and threat of non-communicable diseases constitutes one of the major challenges for development in the twenty-first century, which undermines social and economic development throughout the world, and threatens the achievement of internationally agreed development goals;
2. Recognise that non-communicable diseases are a threat to the economies of many Member States, and may lead to increasing inequalities between countries and populations;
3. Recognise the primary role and responsibility of Governments in responding to the challenge of non-communicable diseases and the essential need for the efforts and engagement of all sectors of society to generate effective responses for the prevention and control of non-communicable diseases;
4. Recognise also the important role of the international community and international cooperation in assisting Member States, particularly developing countries, in complementing national efforts to generate an effective response to non-communicable diseases;
5. Reaffirm the right of everyone to the enjoyment of the highest attainable standard of physical and mental health;
6. Recognise the urgent need for greater measures at global, regional and national levels to prevent and control non-communicable diseases in order to contribute to the full realisation of the right of everyone to the highest attainable standard of physical and mental health;
7. Recall the relevant mandates of the United Nations General Assembly, in particular resolutions 64/265 and 65/238;
8. Note with appreciation the World Health Organisation (WHO) Framework Convention on Tobacco Control, reaffirm all relevant resolutions and decisions adopted by the World Health Assembly on the prevention and control of non-communicable diseases, and underline the importance for Member States to continue addressing common risk factors for non-communicable diseases through the implementation of the 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non-communicable Diseases as well as the Global Strategy on Diet, Physical Activity and Health, and the Global Strategy to Reduce the Harmful Use of Alcohol;
9. Recall the Ministerial Declaration adopted at the 2009 high-level segment of the United Nations Economic and Social Council, which called for urgent action to implement the WHO Global Strategy for the Prevention and Control of Non-communicable Diseases and its related action plan;
10. Take note with appreciation of all the regional initiatives undertaken on the prevention and control of non-communicable diseases, including the Declaration of the Heads of State and Government of the Caribbean Community entitled "Uniting to stop the epidemic of chronic non-communicable diseases", adopted in September 2007; the Libreville Declaration on Health and Environment in Africa, adopted in August 2008; the statement of the Commonwealth Heads of Government on action to combat non-communicable diseases, adopted in November 2009; the outcome declaration of the Fifth Summit of the Americas adopted in June 2009; the Parma Declaration on Environment and

Health, adopted by the Member States in the European Region of WHO in March 2010; the Dubai Declaration on Diabetes and Chronic Non-communicable Diseases in the Middle East and Northern Africa Region, adopted in December 2010, the European Charter on Counteracting Obesity, adopted in November 2006, the Aruban Call for Action on Obesity of June 2011, and the Honiara Communiqué on addressing non-communicable disease challenges in the Pacific region, adopted in July 2011;

11. Take note also with appreciation of the outcomes of the regional multisectoral consultations, including the adoption of Ministerial Declarations, which were held by the World Health Organisation in collaboration with Member States, with the support and active participation of regional commissions and other relevant United Nations agencies and entities, and served to provide inputs to the preparations for the high-level meeting in accordance with resolution 65/238;
12. Welcome the convening of the First Global Ministerial Conference on Healthy Lifestyles and Non-communicable Disease Control, which was organised by the Russian Federation and WHO and held on 28 and 29 April 2011, in Moscow, and the adoption of the Moscow Declaration, and recall resolution 64/11 of the World Health Assembly;
13. Recognise the leading role of the World Health Organisation as the primary specialised agency for health, including its roles and functions with regard to health policy in accordance with its mandate, and reaffirm its leadership and coordination role in promoting and monitoring global action against non-communicable diseases in relation to the work of other relevant United Nations agencies, development banks, and other regional and international organisations in addressing non-communicable diseases in a coordinated manner;

### *A challenge of epidemic proportions and its socio-economic and developmental impacts*

14. Note with profound concern that, according to WHO, in 2008, an estimated 36 million of the 57 million global deaths were due to non-communicable diseases, principally cardiovascular diseases, cancers, chronic respiratory diseases and diabetes, including about 9 million before the age of 60, and that nearly 80 per cent of those deaths occurred in developing countries;
15. Note also with profound concern that non-communicable diseases are among the leading causes of preventable morbidity and of related disability;
16. Recognise further that communicable diseases, maternal and perinatal conditions and nutritional deficiencies are currently the most common causes of death in Africa, and note with concern the growing double burden of disease, including in Africa, caused by the rapidly rising incidence of non-communicable diseases, which are projected to become the most common causes of death by 2030;
17. Note further that there is a range of other non-communicable diseases and conditions, for which the risk factors and the need for preventive measures, screening, treatment and care are linked with the four most prominent non-communicable diseases;
18. Recognise that mental and neurological disorders, including Alzheimer's disease, are an important cause of morbidity and contribute to the global non-communicable disease burden, for which there is a need to provide equitable access to effective programmes and health-care interventions;
19. Recognise that renal, oral and eye diseases pose a major health burden for many countries and that these diseases share common risk factors and can benefit from common responses to non-communicable diseases;
20. Recognise that the most prominent non-communicable diseases are linked to common risk factors, namely tobacco use, harmful use of alcohol, an unhealthy diet, and lack of physical activity;

21. Recognise that the conditions in which people live and their lifestyles influence their health and quality of life, and that poverty, uneven distribution of wealth, lack of education, rapid urbanisation and population ageing, and the economic social, gender, political, behavioural and environmental determinants of health are among the contributing factors to the rising incidence and prevalence of non-communicable diseases;
22. Note with grave concern the vicious cycle whereby non-communicable diseases and their risk factors worsen poverty, while poverty contributes to rising rates of non-communicable diseases, posing a threat to public health and economic and social development;
23. Note with concern that the rapidly growing magnitude of non-communicable diseases affects people of all ages, gender, race and income levels, and further that poor populations and those living in vulnerable situations, in particular in developing countries bear a disproportionate burden and that non-communicable diseases can affect women and men differently;
24. Note with concern the rising levels of obesity in different regions, particularly among children and youth, and note that obesity, an unhealthy diet and physical inactivity have strong linkages with the four main non-communicable diseases, and are associated with higher health costs and reduced productivity;
25. Express deep concern that women bear a disproportionate share of the burden of care-giving and that, in some populations, women tend to be less physically active than men, are more likely to be obese and are taking up smoking at alarming rates;
26. Note also with concern that maternal and child health is inextricably linked with non-communicable diseases and their risk factors, specifically as prenatal malnutrition and low birth weight create a predisposition to obesity, high blood pressure, heart disease and diabetes later in life; and that pregnancy conditions, such as maternal obesity and gestational diabetes, are associated with similar risks in both the mother and her offspring;
27. Note with concern the possible linkages between non-communicable diseases and some communicable diseases, such as HIV/AIDS, and call to integrate, as appropriate, responses for HIV/AIDS and non-communicable diseases and, in this regard, for attention to be given to people living with HIV/AIDS, especially in countries with a high prevalence of HIV/AIDS and in accordance with national priorities;
28. Recognise that smoke exposure from the use of inefficient cooking stoves for indoor cooking or heating contributes to and may exacerbate lung and respiratory conditions, with a disproportionate effect on women and children in poor populations whose households may be dependent on such fuels;
29. Acknowledge also the existence of significant inequalities in the burden of non-communicable diseases and in access to non-communicable disease prevention and control, both between countries, and within countries and communities;
30. Recognise the critical importance of strengthening health systems, including health-care infrastructure, human resources for health, health and social protection systems, particularly in developing countries in order to respond effectively and equitably to the health-care needs of people with non-communicable diseases;
31. Note with grave concern that non-communicable diseases and their risk factors lead to increased burdens on individuals, families and communities, including impoverishment from long-term treatment and care costs, and to a loss of productivity that threatens household income and leads to productivity loss for individuals and their families and to the economies of Member States, making non-communicable diseases a contributing factor to poverty and hunger, which may have a direct impact on the achievement of the internationally agreed development goals, including the Millennium Development Goals;
32. Express deep concern at the ongoing negative impacts of the financial and economic crisis, volatile energy and food prices and ongoing concerns over food security, as well as the increasing challenges posed by climate

change and the loss of biodiversity, and their effect on the control and prevention of non-communicable diseases, and emphasise, in this regard, the need for prompt and robust, coordinated and multisectoral efforts to address those impacts, while building on efforts already under way;

### ***Responding to the challenge: a whole-of-government and a whole-of-society effort***

33. Recognise that the rising prevalence, morbidity and mortality of non-communicable diseases worldwide can be largely prevented and controlled through collective and multisectoral action by all Member States and other relevant stakeholders at local, national, regional, and global levels, and by raising the priority accorded to non-communicable diseases in development cooperation by enhancing such cooperation in this regard;
34. Recognise that prevention must be the cornerstone of the global response to non-communicable diseases;
35. Recognise also the critical importance of reducing the level of exposure of individuals and populations to the common modifiable risk factors for non-communicable diseases, namely, tobacco use, unhealthy diet, physical inactivity, and the harmful use of alcohol, and their determinants, while at the same time strengthening the capacity of individuals and populations to make healthier choices and follow lifestyle patterns that foster good health;
36. Recognise that effective non-communicable disease prevention and control require leadership and multisectoral approaches for health at the government level, including, as appropriate, health in all policies and whole-of-government approaches across such sectors as health, education, energy, agriculture, sports, transport, communication, urban planning, environment, labour, employment, industry and trade, finance and social and economic development;
37. Acknowledge the contribution and important role played by all relevant stakeholders, including individuals, families, and communities, intergovernmental

organisations and religious institutions, civil society, academia, media, voluntary associations, and, where and as appropriate, the private sector and industry, in support of national efforts for non-communicable disease prevention and control, and recognise the need to further support the strengthening of coordination among these stakeholders in order to improve effectiveness of these efforts;

38. Recognise the fundamental conflict of interest between the tobacco industry and public health;
39. Recognise that the incidence and impacts of non-communicable diseases can be largely prevented or reduced with an approach that incorporates evidence-based, affordable, cost-effective, population-wide and multisectoral interventions;
40. Acknowledge that resources devoted to combating the challenges posed by non-communicable diseases at the national, regional and international levels are not commensurate with the magnitude of the problem;
41. Recognise the importance of strengthening local, provincial, national and regional capacities to address and effectively combat non-communicable diseases, particularly in developing countries, and that this may entail increased and sustained human, financial and technical resources;
42. Acknowledge the need to put forward a multisectoral approach for health at all government levels, to address non-communicable disease risk factors and underlying determinants of health comprehensively and decisively; Non-communicable diseases can be prevented and their impacts significantly reduced, with millions of lives saved and untold suffering avoided. We therefore commit to:

### ***Reduce risk factors and create health-promoting environments***

43. Advance the implementation of multisectoral, cost-effective, population-wide interventions in order to reduce the impact of the common non-communicable disease risk factors, namely tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol,

through the implementation of relevant international agreements and strategies, and education, legislative, regulatory and fiscal measures, without prejudice to the right of sovereign Nations to determine and establish their taxation policies, other policies, where appropriate, by involving all relevant sectors, civil society and communities as appropriate and by taking the following actions:

- (a) Encourage the development of multisectoral public policies that create equitable health-promoting environments that empower individuals, families and communities to make healthy choices and lead healthy lives;
- (b) Develop, strengthen and implement, as appropriate, multisectoral public policies and action plans to promote health education and health literacy, including through evidence-based education and information strategies and programmes in and out of schools, and through public awareness campaigns, as important factors in furthering the prevention and control of non-communicable diseases, recognising that a strong focus on health literacy is at an early stage in many countries;
- (c) Accelerate implementation by States parties of the WHO Framework Convention on Tobacco Control, recognising the full range of measures, including measures to reduce consumption and availability, and encourage countries that have not yet done so to consider acceding to the Framework Convention on Tobacco Control, recognising that substantially reducing tobacco consumption is an important contribution to reducing non-communicable diseases and can have considerable health benefits for individuals and countries, and that price and tax measures are an effective and important means of reducing tobacco consumption;
- (d) Advance the implementation of the WHO Global Strategy on Diet, Physical Activity and Health, including, where appropriate, through the

introduction of policies and actions aimed at promoting healthy diets and increasing physical activity in the entire population, including in all aspects of daily living, such as giving priority to regular and intense physical education classes in schools; urban planning and re-engineering for active transport; the provision of incentives for work-site healthy-lifestyle programmes; and increased availability of safe environments in public parks and recreational spaces to encourage physical activity;

- (e) Promote the implementation of the WHO Global Strategy to Reduce the Harmful Use of Alcohol, while recognising the need to develop appropriate domestic action plans, in consultation with relevant stakeholders, for developing specific policies and programmes, including taking into account the full range of options as identified in the global strategy, as well as raise awareness of the problems caused by the harmful use of alcohol, particularly among young people, and call upon WHO to intensify efforts to assist Member States in this regard;
- (f) Promote the implementation of the WHO Set of recommendations on the marketing of foods and non-alcoholic beverages to children, including foods that are high in saturated fats, trans-fatty acids, free sugars, or salt, recognising that research shows that food advertising to children is extensive, that a significant amount of the marketing is for foods with a high content of fat, sugar or salt and that television advertising influences children's food preferences, purchase requests and consumption patterns, while taking into account the existing legislation and national policies, as appropriate;
- (g) Promote the development and initiate the implementation, as appropriate, of cost-effective interventions to reduce salt, sugar and saturated fats, and eliminate industrially produced trans-fats in foods, including through discouraging

the production and marketing of foods that contribute to unhealthy diet, while taking into account existing legislation and policies;

- (h) Encourage policies that support the production and manufacture of, and facilitate access to, foods that contribute to healthy diet, and provide greater opportunities for utilisation of healthy local agricultural products and foods, thus contributing to efforts to cope with the challenges and take advantage of the opportunities posed by globalisation and to achieve food security;
  - (i) Promote, protect and support breastfeeding, including exclusive breastfeeding for about six months from birth, as appropriate, as breastfeeding reduces susceptibility to infections and the risk of under nutrition, promotes infant and young children's growth and development and helps to reduce the risk of developing conditions such as obesity and non-communicable diseases later in life, and, in this regard, strengthen the implementation of the international code of marketing of breast milk substitutes and subsequent relevant World Health Assembly resolutions;
  - (j) Promote increased access to cost-effective vaccinations to prevent infections associated with cancers, as part of national immunisation schedules;
  - (k) Promote increased access to cost-effective cancer-screening programmes as determined by national situations;
  - (l) Scale up, where appropriate, a package of proven effective interventions, such as health promotion and primary prevention approaches, and galvanise actions for the prevention and control of non-communicable diseases through a meaningful multisectoral response, addressing risk factors and determinants of health;
44. With a view to strengthening its contribution to non-communicable disease prevention and control, call upon the private sector, where appropriate,

to: (a) Take measures to implement the WHO set of recommendations to reduce the impact of the marketing of unhealthy foods and non-alcoholic beverages to children, while taking into account existing national legislation and policies;

- (b) Consider producing and promoting more food products consistent with a healthy diet, including by reformulating products to provide healthier options that are affordable and accessible and that follow relevant nutrition facts and labelling standards, including information on sugars, salt and fats and, where appropriate, trans-fat content;
- (c) Promote and create an enabling environment for healthy behaviours among workers, including by establishing tobacco-free workplaces and safe and healthy working environments through occupational safety and health measures, including, where appropriate, through good corporate practices, workplace wellness programmes and health insurance plans;
- (d) Work towards reducing the use of salt in the food industry in order to lower sodium consumption;
- (e) Contribute to efforts to improve access and affordability for medicine and technologies in the prevention and control of non-communicable diseases;

#### ***Strengthen national policies and health systems***

45. Promote, establish or support and strengthen, by 2013, as appropriate, multisectoral national policies and plans for the prevention and control of non-communicable diseases, taking into account, as appropriate, the 2008-2013 WHO Action Plan for the Global Strategy for the Prevention and Control of Non-communicable Diseases, and the objectives contained therein and take steps to implement such policies and plans;
- (a) Strengthen and integrate, as appropriate, non-communicable disease policies and programmes into health-planning processes and the national development agenda of each Member State;

- (b) Pursue, as appropriate, comprehensive strengthening of health systems that support primary health care, deliver effective, sustainable and coordinated responses and evidence-based, cost-effective, equitable and integrated essential services for addressing non-communicable disease risk factors and for the prevention, treatment and care of non-communicable diseases, acknowledging the importance of promoting patient empowerment, rehabilitation and palliative care for persons with non-communicable diseases, and a life course approach, given the often chronic nature of non-communicable diseases;
- (c) According to national priorities, and taking into account domestic circumstances, increase and prioritise budgetary allocations for addressing non-communicable disease risk factors and for surveillance, prevention, early detection, and treatment of non-communicable diseases, and the related care and support including palliative care;
- (d) Explore the provision of adequate, predictable and sustained resources, through domestic, bilateral, regional and multilateral channels, including traditional and voluntary innovative financing mechanisms;
- (e) Pursue and promote gender-based approaches for the prevention and control of non-communicable diseases founded on data disaggregated by sex and age in an effort to address the critical differences in the risks of morbidity and mortality from non-communicable diseases for women and men;
- (f) Promote multisectoral and multi-stakeholder engagement in order to reverse, stop and decrease the rising trends of obesity in child, youth and adult populations respectively;
- (g) Recognise where health disparities exist between indigenous peoples and non-indigenous populations in the incidence of non-communicable diseases, and their common risk factors, that these disparities are often linked to historical, economic and social factors, encourage the involvement of indigenous peoples and communities in the development, implementation, and evaluation of non-communicable disease prevention and control policies, plans and programmes, where appropriate, while promoting the development and strengthening of capacities at various levels and recognising the cultural heritage and traditional knowledge of indigenous peoples and respecting, preserving and promoting, as appropriate, their traditional medicine, including conservation of their vital medicinal plants, animals and minerals;
- (h) Recognise further the potential and contribution of traditional and local knowledge and in this regard, respect and preserve, in accordance with national capacities, priorities, relevant legislation and circumstances, the knowledge and safe and effective use of traditional medicine, treatments and practices, appropriately based on the circumstances in each country;
- (i) Pursue all necessary efforts to strengthen nationally driven, sustainable, cost-effective and comprehensive responses in all sectors for the prevention of non-communicable diseases, with the full and active participation of people living with these diseases, civil society and the private sector, where appropriate;
- (j) Promote the production, training and retention of health workers with a view to facilitating adequate deployment of a skilled health workforce within countries and regions, in accordance with the World Health Organisation Global Code of Practice on the International Recruitment of Health Personnel;
- (k) Strengthen, as appropriate, information systems for health planning and management, including through the collection, disaggregation, analysis, interpretation, and dissemination of data and the development of population-based national

- registries and surveys, where appropriate, to facilitate appropriate and timely interventions for the entire population;
- (l) According to national priorities, give greater priority to surveillance, early detection, screening, diagnosis and treatment of non-communicable diseases and prevention and control, and to improving the accessibility to the safe, affordable, effective and quality medicines and technologies to diagnose and to treat them; provide sustainable access to medicines and technologies, including through the development and use of evidence-based guidelines for the treatment of non-communicable diseases, and efficient procurement and distribution of medicines in countries; and strengthen viable financing options and promote the use of affordable medicines, including generics, as well as improved access to preventive, curative, palliative and rehabilitative services, particularly at the community level;
  - (m) According to country-led prioritisation, ensure the scaling-up of effective, evidence-based and cost-effective interventions that demonstrate the potential to treat individuals with non-communicable diseases, protect those at high risk of developing them and reduce risk across populations;
  - (n) Recognise the importance of universal coverage in national health systems, especially through primary health-care and social protection mechanisms, to provide access to health services for all, in particular, for the poorest segments of the population;
  - (o) Promote the inclusion of non-communicable disease prevention and control within sexual and reproductive health and maternal and child-health programmes, especially at the primary health-care level, as well as other programmes, as appropriate, and also integrate interventions in these areas into non-communicable disease prevention programmes;
  - (p) Promote access to comprehensive and cost-effective prevention, treatment and care for the integrated management of non-communicable diseases, including, inter alia, increased access to affordable, safe, effective and quality medicines and diagnostics and other technologies, including through the full use of trade-related aspects of intellectual property rights (TRIPS) flexibilities;
  - (q) Improve diagnostic services, including by increasing the capacity of and access to laboratory and imaging services with adequate and skilled manpower to deliver such services, and collaborate with the private sector to improve affordability, accessibility and maintenance of diagnostic equipment and technologies;
  - (r) Encourage alliances and networks that bring together national, regional and global actors, including academic and research institutes, for the development of new medicines, vaccines, diagnostics and technologies, learning from experiences in the field of HIV/AIDS, among others, according to national priorities and strategies;
  - (s) Strengthen health-care infrastructure, including for procurement, storage and distribution of medicine, in particular transportation and storage networks to facilitate efficient service delivery;
- International cooperation, including collaborative partnerships**
- 46. Strengthen international cooperation in support of national, regional, and global plans for the prevention and control of non-communicable diseases, inter alia, through the exchange of best practices in the areas of health promotion, legislation, regulation and health systems strengthening, training of health personnel, development of appropriate health-care infrastructure, diagnostics, and promoting the development, dissemination of appropriate, affordable and sustainable transfer of technology on mutually agreed terms and the production of affordable, safe, effective

and quality medicines and vaccines, while recognising the leading role of WHO as the primary specialised agency for health in that regard;

47. Acknowledge the contribution of aid targeted at the health sector, while recognising that much more needs to be done. We call for the fulfilment of all official development assistance-related commitments, including the commitments by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance by 2015, as well as the commitments contained in the Istanbul Programme of Action for the Least Developed Countries for the Decade 2011-2020, and strongly urge those developed countries that have not yet done so to make additional concrete efforts to fulfil their commitments;
48. Stress the importance of North-South, South-South and triangular cooperation, in the prevention and control of non-communicable diseases to promote at national, regional, and international levels an enabling environment to facilitate healthy lifestyles and choices, bearing in mind that South-South cooperation is not a substitute for, but rather a complement to, North-South cooperation;
49. Promote all possible means to identify and mobilise adequate, predictable and sustained financial resources and the necessary human and technical resources, and to consider support for voluntary, cost-effective, innovative approaches for a long-term financing of non-communicable disease prevention and control, taking into account the Millennium Development Goals;
50. Acknowledge the contribution of international cooperation and assistance in the prevention and control of non-communicable diseases and, in this regard, encourage the continued inclusion of non-communicable diseases in development cooperation agendas and initiatives;
51. Call upon WHO, as the lead United Nations specialised agency for health, and all other relevant United Nations system agencies, funds and programmes, the international financial institutions, development banks,

and other key international organisations to work together in a coordinated manner to support national efforts to prevent and control non-communicable diseases and mitigate their impacts;

52. Urge relevant international organisations to continue to provide technical assistance and capacity-building to developing countries, especially to the least developed countries, in the areas of non-communicable disease prevention and control and promotion of access to medicines for all, including through the full use of trade-related aspects of intellectual property rights flexibilities and provisions;
53. Enhance the quality of aid by strengthening national ownership, alignment, harmonisation, predictability, mutual accountability and transparency, and results orientation;
54. Engage non-health actors and key stakeholders, where appropriate, including the private sector and civil society, in collaborative partnerships to promote health and to reduce non-communicable disease risk factors, including through building community capacity in promoting healthy diets and lifestyles;
55. Foster partnerships between Government and civil society, building on the contribution of health-related NGOs and patients' organisations, to support, as appropriate, the provision of services for the prevention and control, treatment, care, including palliative care, of non-communicable diseases;
56. Promote the capacity-building of non-communicable disease-related NGOs at the national and regional levels, in order to realise their full potential as partners in the prevention and control of non-communicable diseases;

### **Research and development**

57. Promote actively national and international investments and strengthen national capacity for quality research and development, for all aspects related to the prevention and control of non-communicable diseases in a sustainable and cost-effective manner, while noting the importance of continuing to incentivise innovation;

58. Promote the use of information and communications technology to improve programme implementation, health outcomes, health promotion, and reporting and surveillance systems and to disseminate, as appropriate, information on affordable, cost-effective, sustainable and quality interventions, best practices and lessons learned in the field of non-communicable diseases;
59. Support and facilitate non-communicable disease-related research and its translation to enhance the knowledge base for ongoing national, regional and global action;

### **Monitoring and evaluation**

60. Strengthen, as appropriate, country-level surveillance and monitoring systems, including surveys that are integrated into existing national health information systems and include monitoring exposure to risk factors, outcomes, social and economic determinants of health, and health system responses, recognising that such systems are critical in appropriately addressing non-communicable diseases;
61. Call upon WHO, with the full participation of Member States, informed by their national situations, through its existing structures, and in collaboration with United Nations agencies, funds and programmes, and other relevant regional and international organisations, as appropriate, building on continuing efforts to develop before the end of 2012, a comprehensive global monitoring framework, including a set of indicators, capable of application across regional and country settings, including through multisectoral approaches, to monitor trends and to assess progress made in the implementation of national strategies and plans on non-communicable diseases;
62. Call upon WHO, in collaboration with Member States through the governing bodies of WHO, and in collaboration with United Nations agencies, funds and programmes, and other relevant regional

and international organisations, as appropriate, building on the work already under way, to prepare recommendations for a set of voluntary global targets for the prevention and control of non-communicable diseases, before the end of 2012;

63. Consider the development of national targets and indicators based on national situations, building on guidance provided by WHO, to focus on efforts to address the impacts of non-communicable diseases, and to assess the progress made in the prevention and control of non-communicable diseases and their risk factors and determinants;

### **Follow-up**

64. Request the Secretary-General, in close collaboration with the Director-General of WHO, and in consultations with Member States, United Nations funds and programmes and other relevant international organisations, to submit by the end of 2012 to the General Assembly, at its sixty-seventh session, for consideration by Member States, options for strengthening and facilitating multisectoral action for the prevention and control of non-communicable diseases through effective partnership;
65. Request the Secretary-General, in collaboration with Member States, WHO, and relevant funds, programmes and specialised agencies of the United Nations system to present to the General Assembly at the sixty-eighth session a report on the progress achieved in realising the commitments made in this Political Declaration, including on the progress of multisectoral action, and the impact on the achievement of the internationally agreed development goals, including the Millennium Development Goals, in preparation for a comprehensive review and assessment in 2014 of the progress achieved in the prevention and control of non-communicable diseases.

## Appendix 3

### DEPARTMENT OF HEALTH POLICIES/POLICY GUIDELINES

Department Of Health Policies/Policy Guidelines	Year Published
<b>NON-COMMUNICABLE CHRONIC DISEASES</b>	
National programme for control and management of hypertension at primary level	1998
National programme for control and management of diabetes type 2 at primary level	1998
National Guideline on Primary Prevention and Prophylaxis of Rheumatic Fever (RF) and Rheumatic Heart Disease (RHD) for health professionals at primary level	1999
National Guideline on Management and Control of Asthma in children at primary level	1999
Policy Guidelines on primary prevention of chronic diseases of lifestyle (CDL)	1999
National guideline on prevention of falls of older persons	1999
Guideline for the promotion of active ageing in older adults at primary level	1999
National Guideline on foot health at primary level	2000
National Guideline on Long Term Domiciliary Oxygen Therapy (LTDOT)	2001
National Guideline on Stroke and Transient Ischaemic Attack Management	2001
National Guideline on Osteoporosis	2001
National guideline: Management of Asthma in Adults at Primary level	2002
National Guideline: Prevention and management of Overweight and Obesity in South Africa	2003
National Guideline: Early detection and management of Arthritis in adults at primary level	2004
National Guidelines: The management of diabetes type 1 and type 2 in adults at hospital level	2005
Guideline for the management of epilepsy in adults	2005
National Guideline: Non-communicable diseases (NCD) –A Strategic Vision	2006
National Guideline: Updated Management of Hypertension in Adults at Primary Care Level	2006
Guidelines for the management of type 1 diabetes in children	2008
Guidelines for the management of epilepsy and seizures in children at hospital level	2008
National Guideline: Management of Substance Abuse and Misuse amongst Older Persons	2008
Long-term care model implementation framework	2009 - Submitted electronically to Provinces
Diabetes declaration implementation strategy	2009 - Submitted electronically to Provinces
Tobacco Products Amendment Act,	2009
Promotion of Physical Activity in Older Persons	2011
Management of Foot Health at Primary Level	2011
Regulations relating to <i>Trans</i> -fat in foodstuffs.	2011
<b>CANCER RELATED</b>	
National cancer control programme – Baseline Document	1999
National Guideline: Cervical Cancer Screening Programme	2000
Information on Female Breast Cancer for Primary Level Health Care Providers	2002
National guideline on testing for prostate cancer at primary level and hospital level	2003
National Guideline: Palliative care for adults – A guide for health professionals in South Africa	2003
National Guideline: A Guide for Health Care Personnel in Paediatric Palliative Care	2005

Department Of Health Policies/Policy Guidelines	Year Published
Regulation on the Compulsory Registration of Cancer	2011
<b>EYE HEALTH</b>	
National Guideline on Management and Control of Eye Conditions at Primary Level	2000
Guidelines for Cataract Surgery in South Africa	2001
National Guideline: Prevention of blindness in South Africa	2002
National Guideline: Refractive errors screening for persons 60 years and older	2004
Refractive errors screening guideline for school children	2008
<b>DISABILITY RELATED</b>	
National rehabilitation policy	2000
Recommended minimum criteria to improve access to health care facilities	2002
Standardisation of provision of assistive devices in South Africa	2003
<b>MENTAL HEALTH</b>	
Mental Health Policy Guidelines	1977
Norms Manual for Severe Psychiatric Conditions	2000
Mental Health care Act No 17 of 2002 and its Regulations	2005
Child and Adolescent Mental Health Policy Guidelines	2005
Regulations relating to health messages on container labels of alcoholic beverages, Foodstuffs, Cosmetics and Disinfectants Act, 1972	2007. Amended 2008
Mental Health Review Board Orientation Guideline and Manual	2007
Mini Drug Master Plan 2011/12-2013/14.	2011
Electro-Convulsive Therapy (ECT) Guidelines.	2011
<b>ORAL HEALTH</b>	
National Norms and Standards for Secondary and Specialised Oral Health Care	2006
National Norms, Standards and Practice Guidelines for Primary Oral Health Care	2007
National Oral Health Strategy	2009

## References

### (Endnotes)

- 1 World Health Organisation. The Brazzaville Declaration on Non-communicable Diseases Prevention NCD Control In The Who African Region. Brazzaville, 2011
- 2 First Global Ministerial Conference on Healthy Lifestyles and Non-communicable Disease Control Moscow, 28-29 April 2011. Moscow Declaration
- 3 World Health Organisation. Non-communicable Diseases Country Profiles. World Health Organisation, Geneva 2011
- 4 World Health Organisation. Global status report on NCDs. Geneva 2010.
- 5 Statistics South Africa. Mortality and causes of death in South Africa, 2008: Findings from death notification. 2011
- 6 World Health Organisation. Non-communicable Diseases Country Profiles. World Health Organisation, Geneva 2011
- 7 World Health Organisation. Non-communicable Diseases Country Profiles. World Health Organisation, Geneva 2011
- 8 Rosana Norman, Debbie Bradshaw, Michelle Schneider, Desiree Pieterse, Pam Groenewald Revised Burden of Disease Estimates for the Comparative Risk Factor Assessment. MRC. 2000.
- 9 Department of Health. Report: national Children's oral health Survey South Africa, 1999-2002. Pretoria, 2003
- 10 Herman AA, Stein DJ, Seedat S, Heeringa SG, Moomal H, Williams DR. The South African Stress and Health (SASH) study: 12-month and lifetime prevalence of common mental disorders. S Afr Med J. 2009 May, 339-44.
- 11 Reddy SP, James S, Sewpaul R, Koopman F, Funani NI, Sifunda S, Josie J, Masuka P, Kambaran NS, Omdardien RG. Umthente Uhlaba Usamila – The South African Youth Risk Behaviour Survey 2008. Cape Town: South African Medical Research Council, 20
- 12 Department of Health. National Guideline. Prevention of Blindness in South Africa. 2002
- 13 Hough S, Ascott-Evans b, Brown S et al. Guideline for the diagnosis and Management of Osteoporosis. National Osteoporosis Foundation of South Africa, 2010
- 14 World Health Organisation. Non-communicable Diseases Country Profiles. World Health Organisation, Geneva 2011
- 15 Department of Health. *South African Demographic and Health Survey 2003*. Full report. Pretoria:DOH, 2004
- 16 Reddy SP, James S, Sewpaul R, Koopman F, Funani NI, Sifunda S, Josie J, Masuka P, Kambaran NS, Omdardien RG. Umthente Uhlaba Usamila – The South African Youth Risk Behaviour Survey 2008. Cape Town: South African Medical Research Council, 2010
- 17 Bradshaw D, Steyn K, Levitt N, and Nojilana B. 2011. Non-Communicable Diseases – A race against time. MRC Policy Briefs. <http://www.mrc.ac.za/policybriefs/raceagainst.pdf>
- 18 Seggie J. Alcohol and South Africa's youth. SAMJ July 2012 No 7587
- 19 World Health Organisation. Global status Report on Alcohol and Health 2011. Geneva
- 20 Reddy SP, Panday S, Swart D, Jinabhai CC, Amosun SL, James S, Monyekei KD, Stevens G, Morejele N, Kambaran NS, Omdardien RG and Van den Borne HW. *Umthente Uhlaba Usamila* – The South African Youth Risk Behaviour Survey 2002. Cape Town: South African Medical Research Council, 2003.
- 21 Reddy SP, James S, Sewpaul R, Koopman F, Funani NI, Sifunda S, Josie J, Masuka P, Kambaran NS, Omdardien RG. *Umthente Uhlaba Usamila*– The South African Youth Risk Behaviour Survey 2008. Cape Town: South African Medical Research Council, 2010.
- 22 Bradshaw D, Steyn K, Levitt N, and Nojilana B. 2011. Non-Communicable Diseases – A race against time. MRC Policy Briefs. <http://www.mrc.ac.za/policybriefs/raceagainst.pdf>
- 23 Hofman K and Tollman S. 2011. Prevention Matters for a Healthier SA. Phuza Wize, Supplement to the Mail & Guardian, November 11 to November 17, 2011.

- 24 Chisholm D. *Avoidable burden of NCDs - cost-effectiveness considerations* -NCD Symposium for Low and Middle Income Countries, Geneva. Dec 2010
- 25 Cecchini, M, Sassi F, Lauer JA, Lee YY, Guajardo-Barron V, Chisholm D. 2010. Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness. *The Lancet*, 2010; 376: 1775-84
- 26 Mayosi B M, Flisher A J, Lalloo U G, Sitas F, Tollman S M, Bradshaw D., The burden of non-communicable diseases in South Africa. *The Lancet* August 2009, 54-67.
- 27 Hofman K and Tollman S. 2011. Prevention Matters for a Healthier SA. *Phuza Wize*, Supplement to the Mail & Guardian, November 11 to November 17, 2011.
- 28 Health in All Policies – A pathway for thinking about our broader societal goals. *Public Health Bulletin* 2010; Vol. 2; No. 7
- 29 Temple, et. al., "Price and availability of healthy food: A study in rural South Africa." *Nutrition Journal* 1 (2010): 1-4.
- 30 World Health Organisation. *Closing the Gap in a Generation. Health equity through action on the social determinants of health*. WHO 2008.
- 31 First Global Ministerial Conference on Healthy Lifestyles and Non-communicable Disease Control, Moscow, 28-29 April 2011. Discussion Paper: Intersectoral Action on Health: A Path for Policy-makers to Implement Effective and Sustainable Intersectoral Action on Health.
- 32 Singh S. Intersectoral action on Healthy lifestyles and non-communicable disease control. Paper presented at the SA Summit on NCDs, 2011
- 33 Department of Health. *Human resources for Health South Africa. HRH Strategy for the Health sector: 2012/13-2016/17*. Pretoria, 2011
- 34 Department of Health. *Human resources for Health South Africa. HRH Strategy for the Health sector: 2012/13-2016/17*. Pretoria, 2011
- 35 Bradshaw D, Steyn K and Pascal-Kengne A. Surveillance and Research for the Prevention and Control of NCDs. Paper presented at SA NCD summit 2011.
- 36 Department of Health. *Human Resources for Health South Africa. HRH Strategy for the Health sector: 2012/13-2016/17*. Pretoria, 2011

**“ I am confident that  
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five year strategy.”**

**- Dr PA Motsoaledi (MP) Minister of Health**

