

National Action Plan

on

Physical Activity

2011-2014

Republic of Mauritius



FOREWORD

Physical inactivity has been identified by the World Health Organisation (WHO) as the fourth leading risk factor for global mortality after high blood pressure, tobacco use and high blood glucose. It is also a significant contributing factor to the high prevalence of non communicable diseases (NCDs) globally and in Mauritius.

Mauritius is known to have been successful in controlling and eradicating major infectious diseases. However, there is concern about the growing rise in the prevalence of NCDs and their risk factors following the accelerated epidemiological transition which the country has undergone over the last decades. Today, chronic non-communicable diseases account for more than 70% of the burden of diseases and more than two-thirds of the total mortality in the country.

No doubt, socio-economic conditions have improved significantly in the country since the sixties. With rapid industrialization and introduction of new technologies, people are resorting to less physical efforts and are thus accumulating excess calories. Sedentary life style has become the norm of the day and represents a serious health hazard.

The National Action Plan on Physical Activity (NAPPA) is yet another testimony of my Ministry's commitment to address the risk factors of NCDs in an integrated manner. This plan aims at achieving optimal health and a better quality of life for all Mauritians.

The NAPPA has been developed in collaboration with all stakeholders concerned. It provides the framework for sustained and comprehensive actions for promoting health-enhancing physical activities in the whole population. It sets out clear and realistic objectives to be met over the period 2011 to 2014 and it lays down the strategies for the promotion of a culture of physical activity in the spirit of the Ottawa Charter for Health Promotion. The Plan offers an opportunity to help reduce the burden of non-communicable diseases and their risk factors by ensuring the development of a physically active and healthy nation. It has thus the potential of bringing huge dividends for the country.

I should like to express my gratitude and to convey my thanks to all those who have been involved in the development of this Action Plan. Its implementation will once again require the collaboration and commitment of all parties in building a concerted national effort. I have no doubt that every Mauritian will join us in this endeavour and I am confident that together we can achieve the objectives set in the Plan.

A handwritten signature in black ink, appearing to read 'S. Hanoomanjee', written in a cursive style.

Mrs S. Hanoomanjee
Minister of Health and Quality of Life

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Executive summary

Physical activity is a key determinant of health. Its fundamental importance in energy balance and weight control and in reducing the risks of coronary heart disease, stroke, hypertension, diabetes, colon cancer, breast cancer, and depression has been widely recognized. It is also substantially beneficial to health in many other conditions.

The National Action Plan on Physical Activity (NAPPA) 2011-2014 has been prepared mainly in response to the growing problem of non-communicable diseases (NCDs) in Mauritius, where more than 70% of the burden of disease is attributable to NCDs. The National NCD survey carried out in 2004 showed that among adults aged 30 years and above, 19.3 % had diabetes and 29.7 % had high blood pressure. It also indicated that only one in four (24.5%) adult Mauritian males and one in ten (9.5%) adult Mauritian females practised regular physical activity. The results from the NCD Survey 2009 indicate that in the age group 25 to 74 years, the prevalence of Diabetes is 23.6% and that of Hypertension is 37.9%. The percentage of men and women practising sufficient leisure physical activity is 23.2% and 10.9% respectively. The Global School Health Survey 2007 conducted among students aged 13 to 15 years shows that only 13% were engaged in regular physical activity while 34.8% had sedentary habits.

The NAPPA provides the framework for sustained and comprehensive actions to promote health-enhancing physical activity involving the major stakeholders, and reflects the commitment and aspirations of policy-makers to provide better health and quality of life to the population. It builds upon the achievements of different stakeholders who are already providing facilities and opportunities for the practice of regular physical activity. The challenge now is to pool and optimize available resources and generate additional support to address the changing and growing needs of the population.

The objectives of the NAPPA will be met by using a combination of strategies like networking, advocacy and capacity-building to create the supportive environment for regular physical activity in the population. It will require major policy decisions to influence urban planning to provide more sites for the practice of physical activity. Gender and socio-cultural sensitivities will also be taken into account to generate interest for physical activity in specific population groups. However, the fundamental recommendation of the NAPPA is the practice of 30 minutes of moderate physical activity five times a week for adults and 60 minutes of moderate to vigorous exercise daily for children.

The NAPPA marks another milestone in the attempts of the public health sector to re-orientate its health services to give more importance to prevention and health promotion. It is considered as a window of opportunity to reduce the burden of non-communicable diseases in the years to come, and involve the population in individual and collective efforts to build a culture of physical activity and a healthier nation.

Introduction

Unhealthy diet and physical inactivity are among the leading causes of major non-communicable diseases worldwide, including cardiovascular diseases, type 2 Diabetes, and certain types of cancers. Sedentary lifestyle is a major underlying cause of death and disability. Physical inactivity increases all causes of mortality, doubles the risks of cardiovascular diseases, type 2 Diabetes and obesity. It also increases the risk of colon and breast cancer, high blood pressure, lipid disorder, osteoporosis, depression and anxiety.

According to the WHO two million deaths each year are attributable to physical inactivity. The World Health Report 2002 indicates that mortality, morbidity and disability attributed to the major non-communicable diseases currently account for about 60% of all deaths and 47% of the global burden of disease, which figures are expected to rise to 73% and 60% respectively by 2020. 66% of the deaths attributed to non-communicable diseases occur in developing countries where those affected are on average younger than in developed countries.

Due to rapid industrialisation and general improvements in living standards over the past five decades Mauritius has undergone an epidemiological transition in the profile of diseases. In Mauritius the NCDs account for more than 70% of the burden of disease and have assumed epidemic proportions. Successive national non-communicable disease surveys since 1987 have revealed a high prevalence of non-communicable diseases and their risk factors. The last survey conducted in 2009 indicated the following findings in the age group 25 to 74years:

Disease/Risk factor	Prevalence (%)
Diabetes Mellitus	23.6
High blood pressure	37.9
Obesity	16.0
Overweight	34.9
High cholesterol	34.7

Source: Mauritius National NCD Survey 2009

Heart diseases and diabetes mellitus were the first two principal underlying causes of mortality in 2009 with 19.0% and 22.8% deaths respectively. Deaths due to Cancer was in the third position accounting for 12.1% of deaths. The distribution of deaths per Chapter of the International Classification of Diseases indicated that diseases of the circulatory system and diabetes mellitus were responsible for 35% and 22.8% of the deaths respectively in 2008. The trend over the past three decades is shown in the table below:

% Underlying Cause of death	1975	1985	1995	2005	2009
Heart Diseases	17.2	19.7	21.5	22.8	19.0
All Circulatory Diseases	28.4	32.4	35.3	37.3	33.7
Diabetes Mellitus	2.7	7.8	14.8	21.1	22.8
Total Circulatory & DM	31.1	40.2	50.1	58.4	56.5

Source: Health Statistics Report 2009

The undiminished rise in NCDs is a cause of great concern to the whole community. The National Action Plan on Physical Activity attempts to respond to the urgent need for a comprehensive strategy for the promotion of physical activity in the Mauritian population so as to ensure that the future generations enjoy a healthier and better quality of life.

Situation Analysis

Levels of inactivity are high in virtually all developed and developing countries. In developed countries more than half the adults are insufficiently active. Data gathered on the health surveys from around the world is remarkably consistent. The proportion of adults who are sedentary or nearly so ranges from 60 to 85 %.

In Mauritius, though there has been an increasing trend in physical activity level since the first National NCD Survey in 1987, the stark reality is that only one in every four Mauritian males and one in ten Mauritian females aged 35 – 54 years is engaged in adequate physical activity, as indicated in the table below.

Sex	1987*	1992*	1998*	2004*
Male	11.8	17.3	21.2	24.5
Female	1.4	2.3	7.2	9.5

*adjusted for age

Source: Mauritius NCD Survey Report 2004

In Rodrigues, the prevalence of moderate or heavy leisure physical activity in age group 35-54 years is as follows:

Sex	1992	1999	2004
Male	20.2	19.7	22.0
Female	1.9	2.3	5.3

Source: Mauritius NCD Survey Report 2004

Data from the National NCD Survey 2009 for Mauritius show that only 16.5% of Mauritians aged 25 to 74 years undertake sufficient vigorous or moderate physical activity to meet the national guidelines of 30 minutes of exercise each day.

Sex	*2009
Male	23.2 %
Female	10.9 %
Both	16.5 %

Source: Mauritius NCD Survey 2009- Physical Activity

*Age group 25-74 years

Furthermore, obesity among children is an emerging public health problem. The prevalence of obesity in children and adults in Mauritius as per the National Nutritional Survey 2004 is as follows:

Age group	Overweight (%)	Obesity (%)	Overweight & Obesity(%)
5-11 yrs	7.7	8.1	15.8
12-19 yrs	8.4	7.3	15.7
20-74 yrs	25.4	10.3	35.7

There is evidence that an increasing number of youngsters are developing Type 2 diabetes in all races. Moreover 80% of Type 2 diabetes patients are obese at the time of diagnosis.

Around the world physical activity levels are decreasing among young people. The WHO estimates that less than one third of young people are sufficiently active to benefit their present and future health and well being.

According to the Global School Health Survey 2007 conducted among students aged 13 to 15 years in Mauritius, only 13% were engaged in regular physical activity of at least 60 minutes per day and 34.8% had sedentary habits. A survey on health risky behaviour among youths in 2006 indicated that only 14.8% engaged in vigorous exercise and 17.7% in moderate exercise.

However, in Mauritius there is an absence of data regarding levels of knowledge, attitudes and perceptions about physical activity in the population in general and a lack of data on levels of physical activity in the age group of 54 years and above.

Justification for a National Plan of Action

A significant proportion of health spending is due to costs related to lack of physical activity and obesity.

The *health benefits* of regular physical activity are many. It not only has the potential to improve and maintain good health in the population but it can also bring important *social and economic benefits*.

Physical activity is defined as any body movement produced by skeletal muscles that result in energy expenditure by the individual. It is a behaviour that involves all large muscle movements for various purposes and carried out during the day. *Exercise* is a subset of physical activity behaviour that involves purposeful and repetitive movements with the aim of improving cardio-respiratory or muscular/physical fitness. It is carried out in a planned and structured manner.

Frequent and regular aerobic exercises have been shown to:

- Prevent obesity by disposing of the excess calories
- Prevent high blood pressure
- Reduce the risk of cardiovascular diseases
- Reduce the risks of developing Type 2 diabetes mellitus
- Reduce the risks of developing certain cancers
- Reduce blood cholesterol levels
- Reduce stress, insomnia and depression

Physical exercises are important for maintaining physical fitness and can contribute positively to:

- Maintaining a healthy body weight
- Building and maintaining healthy bone density, muscle strength and joint mobility
- Protection against osteoporosis
- Promoting physiological well being
- Reducing surgical risks
- Strengthening the immune system

People who are physically fit due to regular exercises have a better quality of life and longer life expectancy.

Adequate regular physical exercise is an important component in the prevention of non-communicable diseases and in the maintenance of overall health. There is evidence that even modest regular physical activity and dietary changes can prevent more than half of the cases of type 2 Diabetes. This is of particular relevance to a country like Mauritius which has one of the highest prevalence rates of Diabetes in the world.

For people of all ages physical activity improves the quality of life in many ways by creating and sustaining well being. In the context of an ageing population, it is

universally agreed that reducing and postponing age-related disability through the practice of adequate physical activity is an essential public health measure.

Physical activity benefits communities and economies in terms of reduced health care costs, increased productivity and turnover, better performing schools, lower rate of absenteeism and increased participation in sports and recreational activities.

A positive mental health is promoted through the practice of regular physical activity amongst families and communities. As such it can contribute to the reduction in the incidence of crime, alcoholism, drug abuse and risky behaviour.

Effective public health measures are urgently needed to promote physical activity and improve public health globally. Promoting physical activity can be a highly cost effective and sustainable public health intervention and can serve as an entry point for the prevention of NCDs, which account for more than 70% of the burden of disease in Mauritius, and for the improvement of the overall quality of life.

The World Health Assembly endorsed a Global Strategy on Diet, Physical Activity, and Health in May 2004. It addressed *faulty diet and physical inactivity* as the *two main risk factors* for non communicable diseases. This strategy was supported by Mauritius. In line with the recommendations of WHO, a National Action Plan on Physical Activity for the period 2004 - 2006 was launched in November 2004 and a National Plan of Action on Nutrition has been developed and is being implemented at present.

The Nairobi Call to Action developed at the 7th Global Conference on Health Promotion held in 2009 and in which Mauritius participated, focuses on key strategies and commitments *urgently required* for closing the implementation gap in health and development through health promotion. It urges governments to mainstream health promotion as a core and most cost-effective strategy for improving health and quality of life and reducing health inequities and poverty.

The time has come for the elaboration and implementation of a National Action Plan on Physical Activity (2011 – 2014) which is realistic, achievable and sustainable with clearly defined goals and objectives and where emphasis will be laid on preventive and health promotion activities and which will be capable of bringing rich dividends to the country both socially and economically.

Guiding Principles

1. A culture of physical activity will be fostered in the Mauritian population, particularly among people who are physically inactive.
2. Gender equity through the full involvement of all men and women in physical activity will be encouraged and supported.
3. Advocacy and resource mobilization in favour of a national physical activity programme will be carried out with all stakeholders (central government, local governments, the private sector, NGOs etc).
4. Alliances will be established with all sectors in society in order to develop an integrated approach in the promotion of physical activity and to reach the greatest possible number of individuals, families and communities.
5. Relevant legislation will be passed and enforced to provide Mauritians with a physical and social environment that is conducive and supportive to the practice of physical activity.
6. An IEC strategy including appropriate community and media-based activities will be developed to encourage Mauritians to adopt a lifestyle where physical activity has a place of prominence.
7. Facilities for the practice of physical activity by Mauritians will be increased and improved. Access to existing facilities will be improved and new facilities will be created.
8. The physical education and physical activity programmes in institutions of learning at all levels (pre-primary, primary, secondary and tertiary) will be strengthened.
9. Training of manpower in the health and other sectors will be undertaken in order to provide the necessary expertise to those involved in counselling, coaching and the development and implementation of physical activity programmes.
10. Mauritius will encourage and participate in all regional and global initiatives in favour of physical activity.
11. Research, surveillance and evaluation will be carried out to track down population response to physical activity programmes and provide data on trends, levels and determinants of physical activity.

Vision, Goals and Objectives

The National Action Plan on Physical Activity covers a period of four years, that is, from 2011 to 2014.

Vision

To make Mauritius a physically active and healthy nation.

Goals

The main goals of the action plan are:

- To increase and maintain adequate levels of health enhancing physical activity for all people.
- To contribute to the prevention and control of chronic non-communicable diseases.
- To contribute to the achievement of optimal health for all Mauritians.

Objectives

The NAPPA is guided by the following main objectives:

1. To increase the level of adequate physical activity in adult male population from 23.2 % to 35 % by 2014.
2. To increase the level of adequate physical activity in adult female population from 10.9 % to 20 % by 2014.
3. To raise awareness and knowledge of the health benefits of physical activity in the adult population.
4. To raise awareness and knowledge of the health benefits of and increase level of physical activity in the school going population.
5. To increase awareness of the importance of physical activity among key stakeholders.
6. To implement transport and land-use policies that creates appropriate conditions for safe walking and cycling.
7. To ascertain commitment of ministries and local authorities to increase recreational facilities for physical activity.
8. To conduct research and national monitoring of levels of physical activity using standardized surveillance tools.

The SMART (Specific, Measurable, Achievable, Relevant, and Timely) approach will be used in implementing the Action Plan.

Existing Infrastructure and Actions

The setting up of proper infrastructure is one of the key determinants in the population for the practice of physical activity. As indicated below, a number of Ministries and local governments have invested in this direction as well as in manpower capacity, community mobilization, media and other activities:

I. The *Ministry of Health and Quality of Life* had set up a Task Force in December 2002 in order to make recommendations for the promotion of physical activity in the Mauritian population. In June 2003 the Task Force submitted its report which also included a draft policy on physical activity.

Subsequently, a National Action Plan on Physical Activity for the period 2004-2006 was developed. Five Health Clubs were set up throughout the island. With increasing demand from the public, two more Health Clubs have been set up and are operational. Three of these clubs are equipped with treadmills. Physical activities (yoga, aerobic dance and Tai-Chi) are presently carried out in 54 sites in the community. Seventeen instructors are employed by the Ministry of Health & QL on a part-time basis to run classes on yoga. One Health Track was constructed in Rose-Belle in 2010 and is now operational.

Regular talks on importance of physical activity and healthy lifestyle are given in the primary schools by the community health nurses as a component of the school health program. The HIEC Unit also conducts such talks in the schools and community settings and produces health education material on diet and exercise. NCD patients are briefed appropriately by doctors, NCD nurses and dieticians during clinics.

In 2005, a media campaign was carried out on non-communicable diseases which included the production and broadcasting of one TV and two radio spots on physical activity.

II. The *Ministry of Education and Human Resources* runs 63 State Secondary Schools out of which 30 schools have a gymnasium/multipurpose hall (27 have gymnasias and 3 have multipurpose halls). These schools have sports facilities such as football grounds, volleyball, basketball, handball pitches etc. The students use these facilities during school hours and the general public have access to some of the facilities after school hours subject to certain conditions.

In all Primary Schools:

- (a) two slots of 25 minutes each are allocated for Physical Education lessons to each class weekly.
- (b) one slot of 25 minutes is allocated for Health Education lessons to each class weekly.

In all Secondary Schools, two successive periods of 40 minutes each have been allocated to each class weekly for Physical Education lessons.

All State Secondary Schools and State Colleges are serviced by at least one qualified Education Officer for the teaching of Physical Education. Monitoring is done by Physical Education Organisers.

The school curriculum for Physical Education includes lessons on minor games, kids' athletics, simple physical activities and breathing exercises. The MOE&HR has embarked on a pilot project in 14 secondary schools from January 2010 for the introduction of Physical Education as an examinable subject at School Certificate/O Level in 2011.

The ministry in collaboration with other stakeholders organizes activities on related issues like nutrition, sports medicine, diet, obesity and non-communicable diseases besides sports competitions/activities.

Health Clubs have been set up in most of the 67 State Secondary Schools and in 77 out of 109 Private Secondary Schools throughout the island.

The Mauritius Institute of Education offers full-time and part-time Diploma in PE, full-time and part-time Bachelor of Education in PE, and a Post Graduate Certificate in Physical Education. The University of Mauritius runs a diploma course in Sports Science and Recreational Management with an intake of 30 students every two years.

III. The *Ministry of Gender Equality, Child Development and Family Welfare* operates through a network of 16 Women's Centres across the country. In all these centres the following activities are organized:

- Yoga
- Aerobics
- Gym
- Weight management
- Healthy eating
- Self defense

Up to date 11,000 women have benefited from the courses/activities.

(2) 16 Women's Sports Associations (WSAs) have been launched in the Women's Centres to specifically address the issue of obesity and physical fitness among women. They conduct the following sports and physical activities: petanque, volleyball, badminton, Tai-Chi, walking, keep fit exercises, table-tennis and swimming.

(3) A National Awareness Campaign is held yearly in four regions of the island to encourage women to be members of Sports Associations.

(4) The newly inaugurated National Women Development Centre at Phoenix is provided with an equipped Keep Fit corner under a gym instructor.

(5) Training programmes on “Healthy Eating and Nutrition” are held in 25 Centres targeting 500 women in general per year.

(6) 30 Weight Management Clubs have been set up targeting overweight or obese adult women less than 55 years of age.

(7) For promoting physical activities the ministry organizes a National Sports Day yearly in collaboration with the Commission Nationale du Sport Féminin and the Ministry of Youth and Sports besides inter-centre competitions in various sports disciplines.

IV. The *Ministry of Youth and Sports* has five swimming pools which are put at the disposal of the general public and where swimming classes are held under the supervision of qualified instructors. The most recently constructed one is at Mare d’Albert. There are about 900 members in Swimming Clubs which are open to those aged 16 to 80 years.

It also organizes on a regular basis outdoor physical activities for the youth such as trekking. Women in rural areas are encouraged to participate in sports and leisure activities organized by the ministry

It conducts Training of Trainers Courses in Yoga, Tai-Chi and Aerobic Dance with an intake of 10 trainers yearly. Courses are also delivered in youth centres across the island.

V. The *Ministry of Environment* has created 10 Health Tracks (“parcours de santé”) in various parts of the island which are widely used by Mauritians. These tracks provide an opportunity to the population to indulge in physical activities such as jogging and leisure walks in a natural environment.

VI. The *Ministry of Social Security and National Solidarity* has:

- 56 Social Welfare Centres throughout the island that are equipped with sports and related facilities and which are put at the disposal of different age groups.
- 16 Day Care Centres for elderly where physical fitness equipments are made available.
- 17 Gym Clubs for different age groups for promotion of physical fitness and healthy lifestyles.
- 20 Health and Nutrition Clubs operating at Social Welfare Centres.

Regular physical activities such as Walk For Health, Yoga, and Tae Kwon Do are carried out at all the Social Welfare Centres.

VII. The *Sugar Industry Labour Welfare Fund* which also operates under the aegis of the Ministry of Social Security runs more than 120 Community Centres which offer facilities such as volley-ball grounds, petanque courts, equipments and table-tennis tables for the practice of physical activity.

Courses are offered in karaté, taekwondo and yoga. Facilities are extended to Health Clubs for Senior Citizens and women.

Activities such as Family Jogging, indoor and outdoor games, national community games are organized in collaboration with other ministries and non-governmental organizations on a fairly regular basis.

VIII. The *Municipality of Vacoas/Phoenix* runs sixteen gymnasia in different localities within its catchment area which are open to the public for indoor games. It has eleven football grounds equipped with lighting facilities put at the disposal of clubs in the respective localities. It also offers facilities for the practice of yoga, aerobic and karaté.

Two Omni-sports complex have been opened at Phoenix and Paillote for the benefit of the inhabitants.

Recreational parks have been set up in different regions of the town where jogging can equally be practiced.

IX. All *Municipalities and District Councils* have playgrounds for football, volleyball and petanque which are open to the general public. Some of them have health tracks as well. Many offer courses in yoga, aerobic and modern dance. The municipalities of Quatre-Bornes , Beau-Bassin/Rose-Hill, Vacoas/Phoenix and Port Louis all have gymnasia.

The district councils have an impressive number of sports infrastructures which include Football Grounds, Volley Ball pitches, Petanque Courts and Children Play Area and which they manage. Recreational parks are also available.

X. The Public Officers Welfare Council under the aegis of the Ministry of Civil Service & AR, organizes recreational, sports and leisure activities amongst others for public officers thereby providing them with opportunities to maintain their physical fitness and also enabling them to practice their favourite sports activities.

Strategies for Action

Success in the implementation of the NAPPA and the achievement of the goals and objectives assigned to it can only be assured when appropriate strategies are adopted to adequately address the issue under consideration. These strategies will be as follows:

Funding

Allocation of financial resources to implement physical activity policies and plans is essential for any action towards the promotion of physical activity and reflects the degree of national and organizational commitment. Funding of the NAPPA will come mostly from the governmental sector. However, mobilization of funds from non-governmental organizations and the private sector will be fully explored.

Support from stakeholders

The NAPPA identifies a network of relevant stakeholders like Ministries, departments, private sector organizations, non-governmental agencies, and local community groups whose effective collaboration will be necessary for implementing physical activity programmes in specified settings like school, community, workplace and to disseminate health messages on physical activity through relevant media.

Cultural sensitivity

Cultural ties, customs, gender roles and social norms have to be taken into account so that national policies and plans as spelt out in the NAPPA are socially inclusive and participatory.

Integration of physical activity within other related sectors

The high prevalence of non-communicable diseases in Mauritius requires that national policies and plans are coherent and complementary to create the necessary synergy for desirable behavioural changes in the population. The policies adopted in the NAPPA are thus tuned to interventions in other areas such as tobacco control, cancer, alcohol consumption, nutrition and obesity.

A coordinating team

The NAPPA will require leadership and multi-sectoral coordination. A coordinating team having broad representation will be established with relevant stakeholders, details of which are given in the section “Institutional Framework”

Targeting the whole population as well as specific population groups

The NAPPA includes a combination of large scale interventions to reach the whole population as well as interventions to support the individual in his/her effort to be more active physically. For example, community-wide mass media campaigns will be conducted and access to places for physical activity will be enhanced by building walking trails (“parcours de santé”). Some interventions will be tailored to specific population groups such as children, women, older persons, socio-cultural groups and people at risk to develop non-communicable diseases. Combinations of different actions will also be needed in different settings to reach and target populations. Furthermore, interventions will include dissemination of the messages through various channels including: print media, electronic media, regional/local events, influential individuals and role models.

Clear identity

A common *logo* or *mascot* will be established to create an identity for the physical activity programmes and will be used by all stakeholders for mass media and other campaigns or activities.

Leadership and workforce development

Leadership is vital among key individuals involved in the implementation of the NAPPA. It is expected that the members of the coordinating team and community groups will have the leadership role in galvanizing resources and advocating for popular support for physical activity initiatives.

National Physical Activity Guidelines

The NAPPA proposes that the national guidelines on physical activity for the general population and specific population groups (e.g. children, adolescents, adults, women older people, people with disabilities) be developed to educate them on the frequency, duration, intensity and types of physical activity necessary for health. The WHO recommendations will form the basis of the National Physical Activity Guidelines.

Monitoring and Evaluation

Evaluation and on-going monitoring of the *processes* and *outcomes* of actions for the promotion of physical activity is necessary in order to examine programme success and to identify target areas for future plans of action. Outcome evaluation will be carried out through national surveys and monitoring systems by including standardized measures of physical activity. Process evaluation will record implementation and will include documentation of types of programmes and actions, for example, mass media campaigns, dissemination of educational materials to schools and worksites, provision of local physical activity programmes, provision of training sessions. Indicators to monitor the progress of activities have been developed.

Institutional Framework

The development of the NAPPA required the active involvement of different stakeholders. Likewise, the implementation, coordination and monitoring of the Action Plan will require the collaboration and commitment of all parties concerned.

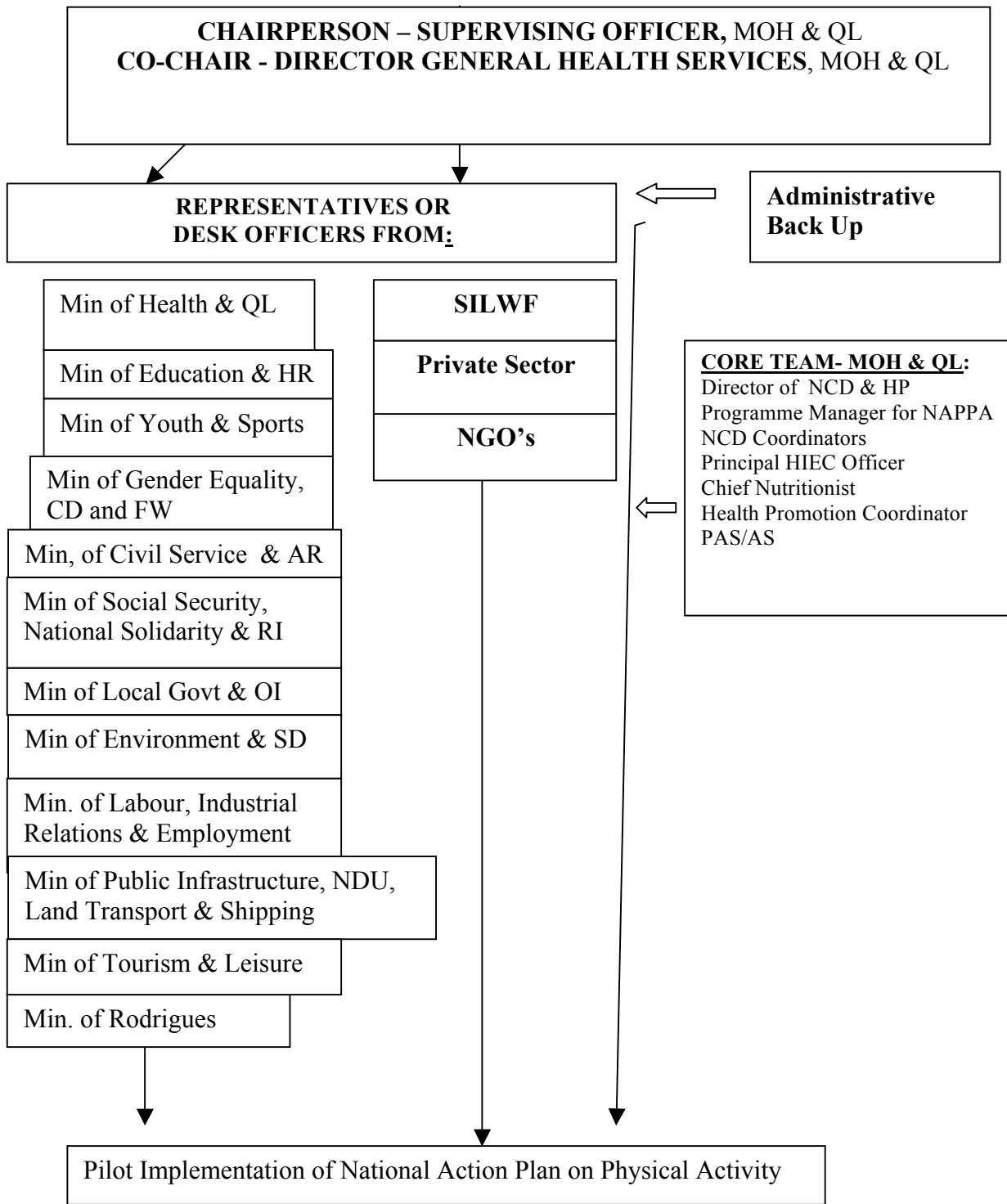
In view of the above, a committee known as the *National Committee on Physical Activity* will be constituted under the Chairmanship of the Supervising Officer, Ministry of Health and Quality of Life, and co-chaired by the Director General Health Services, MOH&QL and will comprise of representatives of the following agencies:

- Ministry of Health and Quality of Life
- Ministry of Youth and Sports
- Ministry of Education and Human Resources
- Ministry of Civil Service & Administrative Reforms
- Ministry of Environment and Sustainable Development
- Ministry of Gender Equality, CD and FW (formerly Ministry of Women's Rights)
- Ministry of Labour , Industrial Relations and Employment
- Ministry of Local Government and Outer Islands
- Ministry of Social Security, National Solidarity and Reform Institutions
- Ministry of Public Infrastructure, NDU, Land Transport and Shipping
- Ministry of Rodrigues
- Ministry of Tourism and Leisure
- Sugar Industry Labour Welfare Fund
- Mauritius Employers Federation
- EPZ Labour Welfare Fund
- Civil society

The terms of reference of the National Committee on Physical Activity would be to:

- coordinate actions of different sectors and stakeholders;
- facilitate the implementation of the NAPPA including resource mobilization;
- monitor and evaluate programme implementation.

At the Ministry of Health & Quality of Life a *core team* will be constituted under the Director NCD & HP to serve as the main driving force with a Programme Manager for NAPPA appointed. The members of the core team shall be as illustrated next page.



OBJECTIVE 1: To increase level of adequate physical activity in the adult male population from 23.2% in 2009 to 35% by 2014

Obj	Activities	Lead agency	Collaborating agencies	Time Frame				Resources	Remarks
				2011	2012	2013	2014		
1.1	Organise worksite awareness activities	Ministry of Labour Industrial Relations and Employment (MLIRE)	MOH, EPZ Labour Welfare Fund, MEF, MEPZA,	✓	✓	✓	✓	Financial & Human	
1.2	Carry out media activities on TV and radios	MOH	MBC/TV and Private Radios.	✓	✓	✓	✓	Financial & Human	
1.3	Encourage walking, jogging and use of stairs	MOH	MOSS, MOGE, MOE, MYS, MLIRE, NGOs	✓	✓	✓	✓	Human	
1.4	Encourage kitchen gardening	Ministry of Agro Industry	MOSS, MOGE, NGOs	✓	✓	✓	✓	Financial & Human	
1.5	Encourage family walks	MOH	MOSS, MOGE, MOE, MYS, MLIRE, NGOs	✓	✓	✓	✓	Human	
1.6	Provide necessary infrastructure at worksite (gym/fitness room)	Ministry of Labour Industrial Relations and Employment	MOCSAR, Private Sector, all Ministries.	✓	✓	✓	✓	Financial & Human	
1.7	Train community groups to undertake health-enhancing physical activity (HEPA) initiatives.	MOH	MOSS, MOGE, MYS, NGOs, CBOs	✓	✓	✓	✓	Financial & Human	
1.8	Produce targeted educational materials	MOE (MCA, MIE)	MOH	✓	✓	✓	✓	Financial & Human	

OBJECTIVE 2: To increase level of adequate physical activity in the adult female population from 10.9% in 2009 to 20% by 2014

Activities 2.1 to 2.8 as 1.1 to 1.8 above									
2.9	Encourage indoor and home practiced physical activities like rope skipping, climbing stairs, treadmill and cycling	MOGE, CD & FW	MOSS, MOH, MYS, NGOs	✓	✓	✓	✓	Human	
2.10	Encourage membership adherence in Weight Management Clubs and Women's Sports Associations run by the Ministry of Gender Equality, CD & FW	MOGE, CD & FW	NGOs	✓	✓	✓	✓	Human	

2.11	Broadcast aerobic shows at appropriate times for housewives	MBC	MOGE, MOH, MYS, NGO.	✓	✓	✓	✓	Financial & Human	
2.12	Organise regional/national events on HEPA to generate interest among women for physical activity.	MOGE, CD & FW	MOSS, MOH, MYS, NGOs	✓	✓	✓	✓	Financial & Human	
OBJECTIVE 3: To raise awareness and knowledge of the health benefits of physical activity in the adult population									
Obj	Activities	Lead agency	Collaborating agencies	Time Frame				Resources	Remarks
				2011	2012	2013	2014		
3.1	Carry out community-based information and education activities	MOH	MOSS, MOGE, MYS, NGOs, CBOs	✓	✓	✓	✓	Financial & Human	
3.2	Produce educational materials for specific age groups	<i>As per Activity 1.8</i>							
3.3	Carry out media campaigns/activities	<i>As per Activity 1.2</i>							
3.4	Produce teaching aids for health professionals and other trainers	MOH	MIE	✓	✓	✓	✓	Financial & Human	
3.5	Mount training programme for health professionals and other trainers	MOH/MIH	MIE, UOM, and other partners	✓	✓	✓	✓	Financial & Human	
3.6	Increase the number and promote the activities of Health Clubs of the MOH	MOH	MOSS, MOGE, MYS, NGOs, CBOs	✓	✓	✓	✓	Financial & Human	
3.7	Empower community-groups through training programme to undertake sensitisation activities in the community	MOH	MOSS, MOGE, MYS, NGOs, CBOs	✓	✓	✓	✓	Financial & Human	
3.8	Organise Sports/ Keep Fit Day	MOCSAR	All Ministries	✓	✓	✓	✓	Financial & Human	
3.9	Organise 'Move for Health' day each year	MOH	Local Government bodies and other Ministries	✓	✓	✓	✓	Financial & Human	
3.10	Organise the World Physical Activity Day (6 April) each year	MOH	All Ministries	✓	✓	✓	✓	Financial & Human	
3.11	Organise inter-ministries sports competition	MOCSAR	All Ministries	✓	✓	✓	✓	Financial & Human	

OBJECTIVE 4: To raise awareness and knowledge of the health benefits of and increase level of physical activity in the school going population

Obj	Activities	Lead agency	Collaborating agencies	Time Frame				Resources	Remarks
				2011	2012	2013	2014		
4.1	Address the benefits of physical activity in school textbooks	MOE	MIE, MOH	On-going					
4.2	Carry out awareness activities for parents through Parent Teachers Associations.	MOE		✓	✓	✓	Financial & Human		
4.3	Organise the World Physical Activity Day in schools (6 April each year)	MOE	MOH, MYS	✓	✓	✓	Financial & Human		
4.4	Carry out awareness activities in schools (talks, film shows, exhibitions, essay and poster competition, group projects on physical activity, etc).	MOE	MOH, MYS	✓	✓	✓	Financial & Human		
4.5	Invite national sport celebrities as guest speakers in schools	MOE		✓	✓	✓	Financial & Human		
4.6	Promote physical education in all schools	MOE		✓	✓	✓	Human		
4.7	Implement "Football for Health Project" in all secondary schools	MOE	MYS, MFA, MOH, FIFA	✓	✓	✓	Human & Financial		
4.8	Organise the school timetable to include a compulsory period of physical activity for 30 minutes daily (unless contraindicated for medical reasons)	MOE		✓	✓	✓	Human		
4.9	Physical education to be assessed as a marking subject	MOE	MES	✓	✓	✓	Human		
4.10	Organise yearly competitions at schools level and inter-schools level.	MOE		✓	✓	✓	Financial & Human		
4.11	Recruit more physical education teachers/instructors to implement activity 4.8	MOE	MCSAR, PSSA	✓	✓	✓	Financial & Human		

OBJECTIVE 5: To increase awareness of the importance of physical activity among stakeholders

Obj	Activities	Lead agency	Collaborating agencies	Time Frame				Resources	Remarks
				2011	2012	2013	2014		
5.1	Prepare an advocacy kit	MOH		✓	✓	✓	✓	Financial & Human	
5.2	Develop National Guidelines on physical activity for general population and specific population groups (e.g. children, adolescents, adults, elderly persons)	MOH/MIH	MOE, MYS, MOGE, WHO, and other partners	✓	✓	✓	✓	Financial & Human	
5.3	Invite renowned experts for advocacy on physical activity from politicians, mayors, councillors, senior civil servants, heads of departments, community leaders as chief guests in various events, etc.	All partners		✓	✓	✓	✓	Financial & Human	

OBJECTIVE 6: To implement transport and land-use policies that creates appropriate conditions for safe walking and cycling.

Obj	Activities	Lead agency	Collaborating agencies	Time Frame				Resources	Remarks
				2011	2012	2013	2014		
6.1	Create and maintain walking/jogging tracks, health tracks and recreational parks with full security.	NDU, MOLG (municipal & district councils)	Min of Tourism, MOH	✓	✓	✓	✓	Financial & Human	
6.2	Create pedestrian zones in towns/urban areas at certain hours on specific days.	MOLG (municipal & district councils)	Police Force	✓	✓	✓	✓	Financial & Human	
6.3	Include pedestrian/cycle tracks in all new roads being constructed.	Min of Public Infrastructure, RDA		✓	✓	✓	✓	Financial & Human	
6.4	Open sports facilities to public during evenings, weekends and public holidays at stadiums, gymnasias, pools and courts.	MYS, MOE	MOLG	✓	✓	✓	✓	Financial & Human	

OBJECTIVE 7: To ascertain commitment of Ministries and local authorities to increase recreational facilities for physical activity									
Obj	Activities	Lead agency	Collaborating agencies	Time Frame				Resources	Remarks
				2011	2012	2013	2014		
7.1	Produce a Charter for Promotion of Physical Activity	MOLG (municipal & district councils)	MOH	✓				Financial & Human	
7.2	Disseminate the Charter	MOLG (municipal & district councils)			✓			Financial & Human	
7.3	Provide annual budget and work plans for the development and maintenance of infrastructure for physical activities.	All ministries and local authorities		✓	✓			Financial & Human	
OBJECTIVE 8 : To conduct research and national monitoring of levels of physical activity									
				2011	2012	2013	2014		
8.1	Set up a multi-sectoral monitoring team	MOH/MIH	All stakeholders	✓				Financial & Human	
8.2	Adapt the surveillance tools developed by the WHO, e.g. the Global Physical Activity Questionnaire (GPAQ)*	MOH	WHO						
8.3	Track down trends on physical activity in different age groups every two/ three years	UOM, MOH- Epidemiology Unit, MIH	MYS, MOE, MRC, WHO, Other national and international agencies.	✓			✓	Financial & Human	
8.4	To conduct research on the Knowledge, Attitude, Behaviours and Practices with regards to physical activity in the different population groups.	UOM , MOH/MIH	MYS, MOE, MRC, WHO, Other national and international agencies.	✓			✓	Financial & Human	

* The GPAQ questionnaire has been included in the National NCD Survey 2009.

Monitoring and Evaluation

A) Process Indicators

Area	Indicators
1.National strategic leadership(National policies, strategies and action plan)	<p>Core indicator</p> <ul style="list-style-type: none"> . National Action Plan on Physical Activity and its implementation plan published. . A National Committee for Physical Activity set up at the Ministry of Health & QL to oversee the implementation of the national action plan . Financial and human resources defined. <p>Expanded indicators</p> <ul style="list-style-type: none"> . The National Committee for Physical Activity is chaired jointly by the Supervising Officer, Ministry of Health and QL and the Director General Health Services, MOH&QL. . The National Committee for Physical Activity comprises of representatives or <i>desk officers</i> from all key sectors. . A core team is set up at the Ministry of Health & QL and a Programme Manager appointed.
2.National strategic leadership (National Dietary and Physical Activity Guidelines)	<p>Core indicator</p> <ul style="list-style-type: none"> . Existence of published national dietary* and physical activity guidelines <p>Expanded indicator</p> <ul style="list-style-type: none"> . Existence of clear mechanism to disseminate and implement the dietary and physical activity guidelines.
3.National strategic leadership(National Budget)	<p>Core indicator</p> <ul style="list-style-type: none"> . Existence of clear and sustainable national budget for action on physical activity. <p>Expanded indicators</p> <ul style="list-style-type: none"> . Existence of a resource mobilisation plan of action on physical activity involving the public and private sectors.

<p>4.Supportive environment for physical activity and transportation</p>	<p>Core indicator</p> <ul style="list-style-type: none"> . Existence of national transport policies that promote active transportation such as walking or cycling to schools and workplaces. <p>Expanded indicators</p> <ul style="list-style-type: none"> . Number of health/fitness tracks available for safe walking/jogging. . Square kilometres of car-free zones.
<p>5.Supportive environment for physical activity at workplaces</p>	<p>Core indicator</p> <ul style="list-style-type: none"> . Number of workplaces with activities to promote physical activity in the workplace. <p>Expanded indicators</p> <ul style="list-style-type: none"> . Number of workplaces with facilities to practice physical activity. . Number of workplaces offering physical activity programmes for employees.
<p>6.Supportive environment for physical activity in schools</p>	<p>Core indicators</p> <ul style="list-style-type: none"> . Existence of national school policy on physical activity and/or physical education <p>Expanded indicators</p> <ul style="list-style-type: none"> . % of primary schools offering every week at least 2 slots for Physical Education of 25 minutes duration each per class. . % of secondary schools offering every week at least 2 periods of Physical Education of 40 minutes duration each per class. . % of schools offering extracurricular physical activity opportunities. . Existence of physical activity awareness programmes at schools. . Number of Physical Education teachers employed in schools. . % of schools with functioning Health Clubs.
<p>7.Education, communication and public awareness</p>	<p>Core indicators</p> <ul style="list-style-type: none"> . Existence of clear national programme or campaign for physical activity education and public awareness. . Existence of sustained institutional support to promote and implement national physical activity guidelines. <p>Expanded indicators</p> <ul style="list-style-type: none"> . Number of channels used to communicate the messages on physical activity. . % of the population or specific target population reached with the physical activity communication campaigns or messages.

8.Health service based programmes	<p>Core indicator</p> <ul style="list-style-type: none"> . Provision of counselling on physical activity included in the national primary care plan. <p>Expanded indicator</p> <ul style="list-style-type: none"> . % of the target populations offered advice on physical activity by primary care personnel.
9.Civil Society and NGOs	<p>Core indicators</p> <ul style="list-style-type: none"> . Number of NGOs and community groups working on physical activity . Active participation of community groups in the implementation of the national policy on physical activity. <p>Expanded indicators</p> <ul style="list-style-type: none"> . Events organised by NGOs and community groups to promote physical activity (e.g organization of “Move for Health Day”)
10.Private industries	<p>Core indicators</p> <ul style="list-style-type: none"> . Number of public-private partnerships to promote physical activity. . Number of private companies supporting physical activity promotion campaigns. <p>Expanded indicators</p> <ul style="list-style-type: none"> . Number of private companies sponsoring sport events.
11. Surveillance, research and evaluation.	<p>Core indicators</p> <ul style="list-style-type: none"> . Specific budget line allocated for monitoring and evaluation of physical activity patterns and/or DPAS(Diet, Physical Activity and Health Strategy) implementation . Monitoring and surveillance system in place to measure process, output and outcome indicators. . National surveillance system in place to measure physical activity patterns and anthropometrical data. . Utilization of valid, reliable, standard instruments such as IPAQ (International Physical Activity Questionnaire) and GPAQ (Global Physical Activity Questionnaire) <p>Expanded indicators</p> <ul style="list-style-type: none"> . % of physical activity interventions that included baseline surveys and post-evaluation.

*Dietary Guidelines are being developed in the National Action Plan on Nutrition

B) Outcome Indicators

I) Short term:

- . % of population aware of at least 3 health benefits of physical activity.
- . % of population recalling at least 3 messages from communication campaigns or strategies on physical activity.

II) Medium term:

- . reduction in the % of overweight and obese individuals in a targeted population participating in a healthy diet and physical activity intervention programme.
- . % of adults aged 25 years and above with raised blood pressure.
- . % of adults aged 25 years and above with raised total cholesterol.
- . % of adults aged 25 years and above with low levels of physical activity.
- . % of children and adolescents with low levels of physical activity.
- . % of physically active children (minimum of 1 hr of vigorous activities at least 3 times per week)
- . % of people walking and bicycling to work, with a duration of ten minutes or more.
- . % of children walking and bicycling to school.
- . % of older adults aged 60 years and above regularly doing physical activities.

III) Long term:

- . Population-based % of overweight or obese adults.
- . Population-based % of overweight or obese children and adolescents.
- . Cause-specific mortality
- . Cause-specific morbidity

ABBREVIATIONS

CBO : Community Based Organisation

CVD : Cardiovascular Disease

DM : Diabetes Mellitus

EPZ : Export Processing Zone

GPAQ : Global Physical Activity Questionnaire

HIEC : Health Information Education and Communication

HEPA : Health Enhancing Physical Activity

HP : Health Promotion

IEC : Information Education and Communication

IPAQ : International Physical Activity Questionnaire

MBC : Mauritius Broadcasting Corporation

MCA : Mauritius College of the Air

MEF : Mauritius Employers Federation

MFA : Mauritius Football Association

MIE: Mauritius Institute of Education

MIH : Mauritius Institute of Health

MLIRE : Ministry of Labour, Industrial Relations and Employment

MOAI : Ministry of Agro Industry and Food Security

MOCSAR : Ministry of Civil Service & Administrative Reforms

MOE & HR : Ministry of Education and Human Resources

**MOGE, CD & FW : Ministry of Gender Equality, Child Development
& Family Welfare**

MOH & QL : Ministry of Health and Quality of Life

MOLG : Ministry of Local Government

MOYS : Ministry of Youth and Sports

MRC : Mauritius Research Council

MSC : Mauritius Sports Council

NAPPA : National Action Plan on Physical Activity

NCD : Non Communicable Disease

NDU : National Development Unit

NGO : Non-Governmental Organisation

PA : Physical Activity

PE : Physical Education

RDA : Road Development Authority

SILWF : Sugar Industry Labour Welfare Fund

UOM : University of Mauritius

WHO : World Health Organisation

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ANNEX

STAKEHOLDERS IN NATIONAL ACTION PLAN ON PHYSICAL ACTIVITY

Participants in Consultative Workshop on Draft National Action Plan on Physical Activity held on 24 March 2009

Ministries

- Ministry of Health & Quality of Life
- Ministry of Youth & Sports
- Ministry of Education & Human Resources
- Ministry of Women's Rights, CD & FW
- Ministry of Social Security & NS
- Ministry of Environment & NDU
- Ministry of Local Government & Rodrigues
- Ministry of Labour & Industrial Relations
- Ministry of Civil Service and Administrative Reforms
- Commissioner of Health, Rodrigues Regional Assembly
- Ministry of Tourism & Leisure

NGOs and Others

- Mauritius Heart Foundation
- Health Foundation Mauritius
- Centre National de Sport Féminin
- Private Institutions through CSR (BAI)
- Mauritius Employers Foundation
- Sugar Industry Labour Welfare Fund
- Mauritius Sports Council
- All Municipalities & District Councils

Institutions of Learning

- University of Mauritius
- Mauritius Institute of Education
- Mauritius Institute of Health

***MOH & QL**

- Director Health Services
- Principal Assistant Secretary
- Regional Public Health Superintendent
- All NCD Coordinators
- Health Promotion Coordinator
- Chief Nutritionist
- Principal Nutritionist
- Principal & Senior HIEC Officers
- HIEC Officers

**MEMBERS OF TECHNICAL COMMITTEE ON PHYSICAL ACTIVITY
(set up in 2007)**

Dr R.P. Ramhith, NCD Coordinator, MOH & QL

Mr D. Mohee, Principal HIEC Officer, MOH & QL

Mr S. Kowlessur, Health Promotion Coordinator, MOH & QL

Mr D. Auchoybur, Senior Sports Officer, Ministry of Youth & Sports

Mr D. Baldeo, Principal PE Organiser, Ministry of Education & SR

Mr S. Sheeraj, Ag Deputy Social Welfare Commissioner, MOSS

Ms N.Jannoo, Ministry of Women's Rights, CD & FW

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