Ministy of Health

STRATEGIC PLAN AND ACTION PLAN

for the PREVENTION and

CONTROL of CANCER

in

JAMAICA

2013 - 2018

MINISTRY OF HEALTH
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INTRODUCTION

Cancer is a complex group of diseases with many possible causes. The known causes of cancer include genetic factors; lifestyle factors such as tobacco use, unhealthy diet, and physical inactivity; certain types of infections; and environmental exposures to different types of chemicals and radiation.

No national data on cancer incidence or outcome is available for Jamaica. Mortality statistics show that as a group cancer is the second leading cause of death among women and the third leading cause of death among men. Data from the Kinston and St. Andrew Cancer Registry reveal that the age standardized incidence of cancer was 189 per 100,000 for men and 144 per 100,000 for women for the period 2003-2007. These rates were essentially unchanged when compared to the rates 1998-2002. Prostate cancer was the leading cause of cancer in men and breast cancer in women.

More than 30% of cancers could be cured if detected early and treated adequately and 30% of cancers could be prevented, mainly by not using tobacco, having a healthy diet, being physically active and prevention infections that may cause cancer.

Because of the wealth of available knowledge, all countries can, at some useful level, implement the six components of cancer control – prevention, early detection, diagnosis and treatment, rehabilitation, and palliative care – and thus avoid and cure many cancers, as well as palliating the suffering.

This five-year Strategic and Action plan proposes to reduce the incidence, mortality and inequities associated with cancer in Jamaica.

THE DEVELOPMENT PROCESS

The National Strategy and Action Plan for the Prevention and Control of Cancer in Jamaica was developed through a series of stakeholder consultations and further developed by a National Cancer Technical Working group. A Task Force/ Technical Working Group (TWG) was formed to take a critical review of cancer care in the public sector, specifically focusing on the full spectrum of cancer
control, that is: all levels of health promotion/prevention, early detection through screening, diagnosis and treatment, rehabilitation and palliative care.

The Cancer control component of the draft National Strategic Plan on Non-communicable Diseases (NCDs) was reviewed and areas for improvement identified. These included enhancing the situational analysis and the action plan. A tool was developed (based on World Health Organization/International Atomic Energy Agency recommendations for cancer control) to collect information on the current national situation for cancer control for the following areas: i) awareness of the population regarding cancer prevention, ii) early detection and screening, iii) diagnosis, iv) treatment, v) rehabilitation and vi) palliative care.

SITUATIONAL ANALYSIS

A. DEMOGRAPHY

Jamaica is the third largest Caribbean island and the largest English-speaking one. In 2011, the population of Jamaica was 2,697,983 (STATIN 2011). The population has increased by 3.46% (90,351) over the past ten (10) years. Males accounted for 49 percent and females 51 percent of the population. The average life-expectancy for Jamaica at birth is 73.43 years (male - 71.78 years female - 75.15 years).
B. JAMAICAN HEALTH SYSTEM

As a part of the process of Health Reform the National Health Services Act (1997) was implemented and divided Jamaica into four Health Regions (see Figure below). Each region is governed by a Regional Health Authority which has a direct management responsibility for the delivery of public health services within its geographically defined area. Services are provided through a network of 24 hospitals including 6 specialist institutions and 316 health centres. The Ministry of Health’s role as a consequence to the new Act to one of setting policy, norms and standards as well as monitoring and evaluating service delivery.
Private health care is provided by general physicians and specialists, and by private laboratories, pharmacies, diagnostic centres and hospitals. The private sector offers primary health care services throughout the island and hospital care through seven hospitals.
C. EPIDEMIOLOGY
Jamaica has experienced an epidemiological transition over the past sixty years. This is illustrated in Table 1, which shows the leading causes of death in Jamaica for selected years between 1945 and 2004. Whereas in 1945, the top five leading causes of death included tuberculosis, syphilis, nephritis and pneumonia, since 1982 cardiovascular diseases, diabetes and malignant neoplasm have been the leading causes of death.

Table 1: Top Five Leading causes of death in Jamaica for selected years from 1945-2004

<table>
<thead>
<tr>
<th>1945*</th>
<th>1982*</th>
<th>1996 **</th>
<th>2004 ***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuberculosis</td>
<td>Cerebrovascular</td>
<td>Cerebrovascular</td>
<td>Cerebrovascular</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>Disease</td>
<td>Disease</td>
<td>Disease</td>
</tr>
<tr>
<td>Nephritis</td>
<td>Heart Disease</td>
<td>Diabetes Mellitus</td>
<td>Diabetes mellitus</td>
</tr>
<tr>
<td>Syphilis</td>
<td>Malignant Neoplasm</td>
<td>Ischaemic heart Disease</td>
<td>Ischemic Heart Disease</td>
</tr>
<tr>
<td>Pneumonia &amp; Influenza</td>
<td>Diabetes Mellitus</td>
<td>Homicide /Assault</td>
<td>Other Heart Disease</td>
</tr>
</tbody>
</table>


This shift is attributed to the implementation of a National Comprehensive programme for the prevention and control of communicable Disease in the Island, an aging population, and the proliferation of unhealthy lifestyles.

Mortality
Cancer in Jamaica has become a leading cause of death. In 2010, 3198 persons (118.2 per 100,000 population) died of cancer (1749 males and 1449 females) accounting for 21% of all deaths in Jamaica.
70% of deaths are due to 4 major NCDs and 24% occur below the age of 70 years old.

Of this total, there were 577 prostate cancer deaths, 329 trachea, bronchus, lung deaths, 153 cervix uteri cancer deaths, 269 colon, rectum, anus cancer deaths, 283 breast cancer deaths and 194 stomach cancer deaths. As the population of Jamaica continues to age, these figures are likely to increase.
In terms of persons dying from cancer prematurely, the three most common sites are breast 12%, trachea, bronchus and lung 11% and cervix 8% (see figure 2). These cancers for the most part are preventable or amenable to early detection and possible cure.

Paediatric cancers
In 2010, there were 32 deaths (42% male and 59% female) due to cancer in children 0 -14 years old, of this 22% leukemia, 9% cancer central nervous system and 6% Non-Hodgkin’s lymphoma.

<table>
<thead>
<tr>
<th>Five most common cancers in the World and Jamaica 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>Both sexes</td>
</tr>
</tbody>
</table>

The cancer epidemiology in Jamaica is similar to that of a low-middle income country. In the high-income countries cervical cancer is no longer found in the top five cancers. Mainly due to successful screening programmes.

![Figure 4: Trend in cancer Age-standardized mortality rates < 70 years old, 2005 - 2010, Jamaica](image)

**Incidence**

No national data on cancer incidence or outcome are available for Jamaica. However, data from the Kinston and St. Andrew Cancer Registry which account for 24% of the population reveal that the age standardized incidence of cancer was 189 per 100,000 for men and 144 per 100,000 for women for the period 2003-2007.
These rates were essentially unchanged when compared to the rates 1998-2002. Prostate cancer was the leading cause of cancer in men and breast cancer in women.

Table 1: Average Age standardized cancer incidence rate per 100,000 for the commonest cancers in males.

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Number of cases</th>
<th>Age standardized cancer incidence rates per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>males</td>
</tr>
<tr>
<td>1993-1997</td>
<td>4285</td>
<td>156.7 (1941)</td>
</tr>
<tr>
<td>1998 – 2002</td>
<td>4737</td>
<td>188.6 (2387)</td>
</tr>
<tr>
<td>2003 - 2007</td>
<td>4981</td>
<td>188.8</td>
</tr>
</tbody>
</table>

Figure 6: Trend in the Average age standardized incidence rate per 100,000 for the commonest cancers in males for Kingston & St. Andrew, Jamaica.
Figure 7: The average cancer incidence rates for males per 100,000 by age group (years), KSA 2003-2007

Figure 8: Trend in the average age standardized incidence per 100,000 for the commonest cancers in females Kingston and St. Andrew, Jamaica

<table>
<thead>
<tr>
<th>Year Interval</th>
<th>Breast</th>
<th>Cervix uteri</th>
<th>Corpus uteri</th>
<th>Colon</th>
<th>Rectum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-1997</td>
<td>43.2</td>
<td>25.2</td>
<td>9.8</td>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>1998-2002</td>
<td>40.1</td>
<td>19</td>
<td>10.3</td>
<td>9.4</td>
<td>3.6</td>
</tr>
<tr>
<td>2003-2007</td>
<td>43.1</td>
<td>17.4</td>
<td>11.5</td>
<td>8.8</td>
<td>4</td>
</tr>
</tbody>
</table>
There were 64 cancers (28 males and 36 females) in children 0-14 years old recorded for Kingston and St. Andrew, by the UWI Cancer Registry for the period 2003 – 2007. This represents an 8.6% decline over the previous period 1998 – 2002 in cases reported by the UWI Cancer Registry.

The most common cancer in males was lymphoma and leukemia and in females Brain, nervous system and leukemia. Leukemia and lymphoma continue to be the most common cancers reported in children.
Risk Factors

Obesity
Obesity has is a major factor fuelling the chronic disease epidemic. Data from the two national surveys suggest that the prevalence of obesity in Jamaica is increasing. In the 2000-2001 Lifestyle survey approximately 20% of the population was obese (30) while the estimated prevalence in 2007-2008 was 25% (35). In addition to the obese persons, approximately 27% of the population was overweight in 2007-2008, resulting in a prevalence of 52% for overweight and obese combined. The situation is markedly more severe among women with 38% being obese and 27% overweight for a combined prevalence of 65%. Among men, 12% was obese and 26% overweight, resulting in a combined overweight/obesity prevalence of 38%.

Physical Activity, Dietary Practices, Tobacco and Harmful use of Alcohol
According to WHO, four risk factors, namely tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol are responsible for the many cancers. It is estimated that 40% of cancer could be avoided through healthy diets regular physical activity and avoidance of tobacco use. These risk factors are fairly common in Jamaica.
Data from JHLS-II show that 65% of the population 15-74 years old currently uses alcohol, 14.5% smoke cigarettes and 13.5% use marijuana (49). The prevalence among males is significantly higher than among females. Approximately 80% of males currently consume alcohol compared to 49% of females. For smoking 22% of men were current smokers compared to 7% of women. By the age of 16 years, nineteen percent of smokers had initiated smoking. Ten percent of men and 2% of women report daily alcohol use and 15% of men and 3% of women reported having 5 or more drinks in a single day.

Physical activity among Jamaicans was examined in respect of both occupational and recreational involvement and in transportation to and from place of work in JHLS-II (49). Almost a half (46%) of the adult population were classified as having low physical activity or being inactive while the highest proportion of men (48%) and women (43%) were classified as engaging in high physical activity and being inactive, respectively.
The majority of Jamaicans were not on any special diet. Being on a special diet was reported by only 2% of the population (49). A preponderance (> 90%) of persons who were diagnosed as being obese, having a high blood pressure and having high cholesterol were not on a specific diet for their condition. The majority of the Jamaican population (74%) reported that vegetable oil was used for cooking, and about a quarter of persons did not use any fat on bread; however 60% of persons used soft margarine on bread. A third of individuals reported that frying was the preferred method of preparing their main protein. The vast majority (99%) of Jamaicans currently consume below the daily recommended portions of fruits and vegetables with no apparent gender differences. In addition to these dietary patterns, recent analyses from studies among youth have found that consumption of sugar-sweetened beverages is associated with obesity. These studies suggest that targeting a reduction in the consumption of sugar sweetened beverages and fast food (saturated fats) would be important targets in reducing the burden of Cancers in Jamaica.

JAMAICA’S RESPONSE TO THE CANCER: PROGRAMMES AND PROGRESS

The Ministry of Health cancer response from the 1980’s focused on Cervical and Breast Cancer programme and the provision of basis diagnosis and treatment for cancer. This approach was taken in light of the evidence for cancer prevention and control and the limited resource setting. The Ministry of Health has had an active cervical cancer screening programme for several years. Although there are coverage gaps and the programme suffers from a number of inefficiencies, it is likely that the programme contributed to the decreasing incidence of cervical cancer in Kingston and St. Andrew [25.2 per 100,000 in 1993-1997 compared to 17.4 in 2003-2007] (46). Programmes for breast cancer screening with mammography could likely produce a similar decline in breast cancer. While there is much debate on the effect of screening on prostate cancer and the recommendation against screening by the US Preventive Services Task Force screening may have greater efficacy in a population with higher prevalence as the proportion of false positives will be lower. Methods to better select who to offer biopsies will also reduce the rates of biopsy related complications and therefore would further improve the risk benefit ratio. Further studies are required in this area both locally and internationally. Programmes for smoking cessation need to be increased in order to reduce the incidence of lung cancer.
A summary outline of the some of the gaps identified is below:

<table>
<thead>
<tr>
<th>Area of focus</th>
<th>Gaps identified</th>
<th>Recommendations to fill gaps</th>
</tr>
</thead>
</table>
| Health Promotion/ Education   | ▪ Many women still unaware of the benefit of pap smears in early detection and possible cure of cancer of the cervix.  
▪ Health promotion initiatives are ineffective  
▪ In 2008 62.4% of all women of reproductive age in Jamaica had at least one pap smear | ▪ Need to intensified health promotion and education especially using mass social marketing/behavior change initiative  
▪ Evidence-based approached to be used in evaluating and modifying health promotion strategies from Head Office level.  
▪ Foster private/public partnerships to address risk factors: tobacco smoke, harmful use of alcohol, unhealthy diet and insufficient physical activity.  
▪ Policy development /legislation |
| Screening for early detection of cancers | ▪ No mammography units in government facilities  
▪ Insufficient use of visual inspection with application of acetic acid (VIAA) to detect early pre-cancerous changes of cervical cancer. | ▪ Mammography units to be placed in Regional Hospitals (4)  
▪ Colposcopes to be placed in centres of excellence and Type 5 health centres to facilitate VIAA and treatment with liquid nitrogen.  
▪ Train non-obstetricians to use colposcopes |
| Diagnosis Of cancers          | - Non-functional equipment e.g. some hospitals have no functional plain x-ray machines, CT scans etc.  
- Lack of endoscopes (e.g. bronchoscope), | ▪ Maintenance/repair contracts required as ongoing concern  
▪ Procure plain X-ray machines for identified locations, newly established centres of excellence, and selected primary health care |
### Area of focus

<table>
<thead>
<tr>
<th>Gaps identified</th>
<th>Recommendations to fill gaps</th>
</tr>
</thead>
</table>
| - Need more imagery equipment at the primary care level  
- Inadequate laboratory services for histopathology and absence of flowcytometry | - Procure endoscopes, colposcopes  
- Procure equipment to support provision of quality health care at the renewed primary care centres e.g. ECG machines, BMI scales, automated blood pressure machines |

#### Treatment of cancer

<table>
<thead>
<tr>
<th>Gaps identified</th>
<th>Recommendations to fill gaps</th>
</tr>
</thead>
</table>
| - Inadequate technology for cancer treatment i.e. radiation therapy with Cobalt-60 is outdated.  
- Inadequate operating theatre time for surgical intervention for some cancers  
- Inadequate Intensive care capacity for postoperative care, as priority given to violence/trauma cases.  
- More basic equipment generally needed  
Inadequate histopathology services with long turnaround times for reports due to:  
- Lack of sufficient equipment for processing samples  
- Lack of adequate human resources i.e. Pathologists (volume of work: number of Pathologists)  
- Absence of | - Procure simulators/treatment planners (two) and two linear accelerators, along with necessary accessories for two Type A hospitals: Kingston Public Hospital (KPH) and Cornwall Regional Hospital (CRH), through public/private funding arrangements  
- Procure basic equipment such as drills, hand pieces, and suction machines for regional and Type A hospitals.  
- Expand the ICUs and institute High Dependency Units in Type A hospitals  
- Training of more radiotherapy technicians  
- Recruit and train histopathologist to conduct biopsies and staff to conduct flow cytometry |
<table>
<thead>
<tr>
<th>Area of focus</th>
<th>Gaps identified</th>
<th>Recommendations to fill gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>immunohistochemistry in the public service to assist with diagnosis, only offered by the UHWI</td>
<td>▪ Equipped and staffed histopathology laboratories developed and established either centrally or regionally at various hospitals.</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>▪ For the diagnosis of haematological malignancies i.e. pediatric and adult leukemias and lymphomas immunotyping using flowcytometry is required. A flow cytometer is now present at the NPHL however the major gap is training. UHWI is the only institution that provides this service at this time.</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>- Little attention is paid to prosthesis and rehabilitation post-surgical intervention for cancer.</td>
<td>▪ Strengthen capacity of the Sir John Golding Institute and its MONEX prosthesis-making arm to address rehabilitation of the patients post-treatment, e.g. mastectomy, amputation etc.</td>
</tr>
</tbody>
</table>
| Palliation    | - Insufficient pain management for terminal cases of cancer  
- Home-based care inadequate | ▪ Update pain management in keeping with new evidence-based practices  
▪ Procure adequate quantity of medications, as much as |
<table>
<thead>
<tr>
<th>Area of focus</th>
<th>Gaps identified</th>
<th>Recommendations to fill gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Train Community Health Aids and selected National Youth Service Workers to carry out role of home-based caregiver in collaboration with the nurse.</td>
</tr>
</tbody>
</table>

**CANCER PREVENTION AND CONTROL MODEL**

The Ministry of Health proposes to establish a National Cancer System of Excellence below is the model to be implemented.
A MODEL FOR NATIONAL CENTRE OF EXCELLENCE FOR CANCER CARE

TERTIARY CARE LEVEL (National Hospital)

Diagnosis
Imaging: x-ray, ultrasonography, mammography, computerized tomography (CT) scan, endoscopy
Laboratory: Cytology, haematology, histopathology, prognostic markers, immunohistochemistry

Treatment
Radiotherapy, complex surgery and chemotherapy, rehabilitation, psychosocial support, self-help groups, patient education programmes

Telemedicine services

Palliative care
Specialist palliative care team: physician, nurse, part-time social worker and pharmacist. All physicians and nurses dealing with cancer patients provide basic palliative care, supervised by the specialist team.

SECONDARY CARE LEVEL (Regional Hospital)

Diagnosis
Imaging: x-ray, ultrasonography, mammography, endoscopy
Laboratory: Cytology including fine-needle aspiration, haematology, biopsy, routine histopathology

Treatment
Moderately complex surgery and chemotherapy (mainly outpatient clinics), rehabilitation, psychosocial support, self-help groups, patient education programmes

Telemedicine services

Palliative care
Specialist palliative care team: physician, nurse, social worker and pharmacist

PRIMARY CARE LEVEL
- Early referral of suspicious cases, simple surgical procedures (e.g. cryotherapy of pre-cancerous lesions of the cervix), retrieval of patients who abandon treatment, patient support groups, patient education and rehabilitation, education and training of community caregivers including traditional healers
- Nurses trained in basic palliative care who train and supervise community volunteers and caregivers
- Community leaders, traditional healers and family caregivers, who are trained to provide basic home-based care
STRATEGIC PLAN

A. FRAMEWORK

<table>
<thead>
<tr>
<th>VISION</th>
<th>Reduce the incidence and prevalence of cancer in Jamaica</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL</td>
<td>The goal of the strategic and action plan is To reduce the burden and cost of preventable morbidity and disability and avoidable premature mortality due to cancer by 25% by 2025.</td>
</tr>
<tr>
<td>OBJECTIVE 1</td>
<td>Reduce the incidence of preventable cancers through primary prevention and health promotion</td>
</tr>
<tr>
<td>OBJECTIVE 2</td>
<td>Identify cancer at its earliest stages through effective screening and early detection</td>
</tr>
<tr>
<td>OBJECTIVE 3</td>
<td>Improve the accessibility, availability and quality of cancer diagnostic and treatment services and programmes</td>
</tr>
<tr>
<td>OBJECTIVE 4</td>
<td>Improve the quality of life of persons living with and affected by cancer through the provision of rehabilitative, supportive and palliative care in an integrated, equitable and sustainable way</td>
</tr>
<tr>
<td>OBJECTIVE 5</td>
<td>To reorient health care sector to support the delivery of services throughout the cancer care continuum.</td>
</tr>
<tr>
<td>OBJECTIVE 6</td>
<td>Improve the effectiveness of cancer control through cancer research and surveillance</td>
</tr>
</tbody>
</table>

B. SCOPE, VISION, MISSION, GUIDING PRINCIPLES, GOAL, OBJECTIVES AND TARGETS

SCOPE

The plan will cover the prevention and control of paediatric and adult cancers with a focus the top five cancers in Jamaica along the cancer care continuum. The National Strategy and Action Plan for the Prevention and Control of Cancer in Jamaica was developed through a series of stakeholder consultations and further developed by a National Cancer Technical Working group. The Strategy and Plan is as component of a wider National Strategic Plan for Non-communicable Diseases. The Cancer Control Strategy and Action Plan provides a comprehensive framework and road map for the reduction of the incidence, morbidity, mortality and socioeconomic impact due to cancer in Jamaica.
The Strategic and Action Plan is aligned to national and international commitments and plans. It is also linked to the National Development Plan Vision 2030. In May 2011, the World Health Assembly adopted the target to reduce by 25% by 2025 mortality from Non-communicable diseases including cancers. This translates to a target of 2% decrease per annum in deaths due to cancers.

This Plan builds on previous and existing cancer control initiatives and aims to close the existing gaps and reduce duplication in the national response and ensure that scare resources are used efficiently.

**PURPOSE**
The strategic and action plan is to provide a framework and road map for National action to combat cancer in Jamaica. In the context of the socioeconomic, cultural and development agenda.

**VISION 2030**
“Jamaica, the place of choice to live, work, raise families, and do business”.

**VISION**
Reduce the incidence and prevalence of Cancer in Jamaica.

**OVERACHING PRINCIPLES AND APPROCHES**
The following **core principles** will guide this National Strategy:

1. Reducing the exposure to risk factors for Cancer
2. Strengthening of Health Systems
3. Building Capacity for Community Based Action / Patient Empowerment
4. Reorientation Reinforcing competence of Health work force
5. Promotion of Multi-sector partnerships
6. Strengthen Cancer Surveillance and Research
7. Leadership and Governance
8. Integrated disease Management
9. Minimize Health Disparities

GOAL

The goal of the strategic and action plan is to reduce the burden and cost of preventable morbidity and disability and avoidable premature mortality due to cancer by 25% by 2025.

TIMEFRAME

The Strategy and Action Plan will be implemented over a five-year period 2013 – 2017. At the end of this period we expect to have achieved the targets as set out in the plan. The plan will be implemented in phases, which include:

- **Phase I** - Short-term these are actions to be implemented over one to two years
- **Phase II** – Medium-term and long-term actions to be implemented over three to five years

The plan will be rolled out on a phased basis the designations of ‘phase 1’ in the plan generally mean actions are to occur within the first one to two years and those designated as ‘phase 2’ mean they will occur within three to five years. Adjustments may be made periodically to this phasing depending on existing resources and evidence.

STRATEGIC OBJECTIVES

There are four priority programme areas that the plan will be implemented under:

FIVE PRIORITY PROGRAMME AREAS:

1. Primary Prevention
2. Early detection
3. Cancer Diagnosis and Treatment
4. Supportive, Rehabilitative and Palliative Care
5. Human Capacity Building and Programme Management
6. Cancer Surveillance and Research

In order to achieve the targets the following strategic objectives will be implemented:
I. **STRATEGIC OBJECTIVE 1**: Reduce the incidence of preventable cancers through primary prevention and health promotion

1.1 Reduce tobacco use
1.2 Reduce harmful use of alcohol
1.3 Create supportive environment to encourage physical activity
1.4 Reduce unhealthy diet and obesity
1.5 Reduce exposure to radiation, environmental and occupational carcinogen

II. **STRATEGIC OBJECTIVE 2**: Identify cancer at its earliest stages through effective screening and early detection

2.1 To ensure that prioritized early detection services are provided in an integrated, equitable and sustainable way.
2.3 To increase to over 80% the awareness of early signs and symptoms of most common cancers among patients and health-care providers
2.4 To achieve through the early detection strategy, early referral and prompt treatment in specialized clinics for over 80% of cervix, breast, prostate, colorectal and stomach cancer patients.
2.5 To reduce late presentation at diagnosis by 50% in persons with cervix, breast, prostate, colorectal and stomach cancer

III. **STRATEGIC OBJECTIVE 3**: Improve the accessibility, availability and quality of cancer diagnostic and treatment services and programmes.

3.1 To provide diagnosis and treatment and rehabilitation as necessary for all disseminated cancers with high potential of being cured or significantly prolonging life
3.2 To achieve early referral and adequate diagnosis and treatment in specialized clinics for over 70% of all patients, identified by the early detection strategy.
3.4 To provide education and support to over 70% of patients diagnosed with cancer
3.5 To increase by 30% the 5-year survival rate of patients with cancers that can be detected early
3.6 To achieve over 40% cure rates in children with acute lymphatic leukaemia and Hodgkin lymphoma

IV. **STRATEGIC OBJECTIVE 4**: Improve the quality of life of persons living with and affected by cancer through the provision of rehabilitative, supportive and palliative care in an integrated, equitable and sustainable way.

4.1 To ensure that at least 30% of advanced cancer patients nationwide get relief from pain and other physical, psychosocial and spiritual problems.

4.2 To provide supportive and rehabilitative services to cancer patients

V. **STRATEGIC OBJECTIVE 5**: To reorient health care sector to support the delivery of services throughout the cancer care continuum.

5.1 To recruit and retain at least 80% of workforce for cancer care.

5.2 To strengthen the human resource capacity to delivery cancer care

5.3 To Training plan for Cancer care

5.4 To plan, monitor and coordinate the response to Cancer prevention and control in Jamaica

VI. **STRATEGIC OBJECTIVE 6**: Improve the effectiveness of cancer control through cancer research and surveillance

6.1 Establish National Cancer Registry

6.2 Develop National Cancer Research Agenda

**BUDGETARY CONSIDERATIONS AND CONTINGENCY ACTIONS**

Successful implementation of the strategic plan and the accomplishment of specified targets will require that the plan be adequately funded. Funding for the projects and programmes included in the strategic plan will require involvement multiple funding agencies. The government of Jamaica will show its commitment to the plan by allocation resources to core staff positions and key projects. Additionally funds will be sought through programme grants and project grants. Grant applications and project proposals will be prepared and submitted to potential funding agencies. Possible funding
agencies will include local funders such as the National Health Fund, Culture Health Arts Sports and Education (CHASE) Fund and corporate foundations. Regional and international funding can be sought through PAHO/WHO, Inter-American Development Bank and the World Bank. It is hoped that with the recent focus on NCDs leading up to and following the UN High Level Meeting in September 2011 the capacity to attract the required funds will be significantly increased.

If the situation arises such that resources to adequately fund the programme are not realized the NCD Committee and the MOH NCD Unit would be required to settle on a limited number of core programmes and projects and focus on these as the main targets for NCD prevention and control.
ACTION PLAN
**Priority AREA #1 PRIMARY PREVENTION**

**STRATEGIC OBJECTIVE:** Reduce the incidence of cancer through primary prevention

**Objective 1:** Reduce the number of people who develop cancers due to tobacco use and second-hand smoke

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<th>Strategy</th>
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<th>Lead Agency or Institution Responsible</th>
</tr>
</thead>
</table>
| 1.1: Accelerate the implementation of the World Health Organization Framework convention on tobacco control | • Work with the Minister of Health to ensure the passage of legislation for the full implementation of the FCTC and MPOWER Package for tobacco control  
• Implement National Social marketing campaign to discourage tobacco smoking in keeping with Article 11 and 12.  
• Provide smoking cessation support for persons wanting to quit smoking in keeping with Article 14.  
• Primary care and hospital services to record smoking status of all clients and initiate referral systems to cessation services.  
• Protect tobacco control policies from commercial and vested interests of the Tobacco industry in accordance with Article 5.3  
• Raise taxes and inflation-adjusted prices on all tobacco products.  
• Implement comprehensive bans on tobacco advertising, promotion and sponsorship in keeping with Article 13.  
• Implement strategies to prevent initiation of smoking among youth 13-15 years old  
• Monitor Tobacco use in adolescent and adults  
• Monitor and evaluate implementation of tobacco control | Phase 1  
Phase 1  
Phase 2  
Phase 2  
Phase 2  
Phase 2  
Phase 2 | Tobacco control regulation 2013 passed  
Number of smoke-free settings  
Number of persons accessing smoking cessation services  
% compliance with documentatio n of smoking status.  
Number of reports of non-compliance with Article | Tobacco control regulation 2013 passed  
Increase in smoke-free settings  
10% reduction in smoking prevalence among adults and adolescents | • Ministry of Health – National Council on Drug Abuse and National Chronic Diseases and Injuries Prevention Unit, Health Promotion and Protection Branch  
• Other sectors MOH, MOF, MOE, Jamaica Customs Department |
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<tbody>
<tr>
<td></td>
<td>control polices.</td>
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<td>5.3</td>
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<td></td>
<td></td>
<td></td>
<td>Number of tobacco products sold to 1000 cigarette equivalents or less per adult</td>
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<td></td>
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<td></td>
<td>Age-standardized prevalence of current tobacco use among person aged 15+ years</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Prevalence of current tobacco use among adolescents</td>
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</table>
**Objective 2: Reduce the number of people who developing alcohol-related cancers**

<table>
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<th>Strategy</th>
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</table>
| Implement the WHO Recommendations for reduction of Harmful Use of Alcohol | • Work with the Minister of Health to support the implementation of the WHO Recommendations for Reduction of Harmful Use of Alcohol as appropriate  
• Social marketing campaign to discourage harmful use of alcohol and raise public awareness, especially among young people, about alcohol-related health risks, including cancer.  
• Strengthen capacity of health-care services to deliver prevention and treatment interventions for hazardous drinking and alcohol use disorders including screening and brief interventions at primary care setting.  
• Ensure that specific cancer risks associated with alcohol are identified in policies and information by Government agencies and other key stakeholders. | Phase 2  
Phase 2  
Phase 2 | Number of WHO recommendations implemented  
Improved access to prevention and treatment interventions for hazardous drinking and alcohol use disorder.  
% relative reduction in overall alcohol use | 2% relative reduction in overall alcohol use, (including hazardous and harmful drinking) | Ministry of Health – National Council on Drug Abuse and National Chronic Diseases and Injuries Prevention Unit, Health Promotion and Protection Branch |
Objective 3: Reduce the number of people who developing physical inactivity related cancers

Target: 5% relative reduction in prevalence of insufficient physical activity

<table>
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<tr>
<th>Strategy</th>
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<th>Target</th>
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</thead>
<tbody>
<tr>
<td>Create supportive environment to encourage physical activity</td>
<td>- Conduct National Knowledge Attitude Practice and Behaviour (KAPB) survey for physical activity.</td>
<td>Phase 1</td>
<td>Prevalence of insufficient physical activity</td>
<td>Reduce by 5%</td>
<td>MOH</td>
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<tr>
<td></td>
<td>- Adopt and implement national guidelines for physical activity</td>
<td>Phase 2</td>
<td></td>
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<td></td>
<td>- Develop policy of physical education with physical activity in all grades of schools</td>
<td>Phase 2</td>
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<td></td>
<td>- Development of a national policy that mandates physical education from Early Childhood to at least grade 11.</td>
<td>Phase 1</td>
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<td></td>
<td>- Development of a curriculum for grade 10 and 11.</td>
<td>Phase 2</td>
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<td></td>
<td>- Develop and implement social marketing campaign to increase physical activity levels and raise the awareness of the link between physical activity and cancer.</td>
<td>Phase 1</td>
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<td></td>
<td>- Promote the building or improvement of parks, walking trails and other facilities to promote increased physical activity</td>
<td>Phase 2</td>
<td></td>
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<td></td>
<td>- Promote physical activity in the workplace</td>
<td>Phase 2</td>
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<td></td>
<td>- Implement exercise prescription programme into primary health care services and outpatient clinics,</td>
<td>Phase 1</td>
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### Objective 3: Reduce the number of people who developing nutrition-related cancers

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</thead>
</table>
| Increase fruit and vegetable consumption | • Implement Infant and Young Child Feeding Policy  
• Implement Food Nutrition and Security Policy  
• Implement National dietary guidelines  
• Work with Ministry of Agriculture to ensure adequate availability of fruits and vegetables  
• Promote subsidies on fruit and vegetable production in order to ensure affordable prices  
• Work with nutritionist to promote methods of vegetable preparation to make them more palatable / enjoyable | Phase 2  
Phase 2  
Phase 2  
Phase 2  
Phase 2 | % increase in consumption of > 5 servings of fruits and vegetables | 100% increase in consumption of > 5 servings of fruits and vegetables | MOH  
MOE |
| Reduce level of sodium consumption and trans-fatty acids | • Measure salt intake on a sub-sample of persons from the national health survey in 2012 and 2017  
• Public education campaign to reduce salt used in cooking, adding salt at the table and consumption of high salt processed foods  
• Reaffirmation by private sector of commitment made to the Port of Spain Declaration and Declaration of St. Ann  
• Partner with food industry, restaurants, cook-shops and trade organizations to reduce the salt content of food prepared outside the home  
• Develop and implement policies measures directed at food producers and processors to eliminate industrially produced trans-fatty acid from food and replace them with polyunsaturated fatty acids  
• decrease the level of saturated fatty acids in food and replace them with polyunsaturated fatty acids | Phase 1  
Phase 1  
Phase 1  
Phase 1  
Phase 2  
Phase 2 | % reduction in mean population intake of salt | 10% reduction in mean population intake of salt | MOH  
MOA  
BSJ |
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Activity</th>
<th>Timeline</th>
<th>Indicator</th>
<th>Target</th>
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</thead>
<tbody>
<tr>
<td>Fatty acids</td>
<td>• reduce the content of free sugar in food and alcoholic beverages</td>
<td>Phase 2</td>
<td></td>
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</tr>
</tbody>
</table>
| Promote healthy diets     | • Develop and implement social marketing campaign on healthy diet and eliminating cooking and preservation methods know to increase cancer for general population  
  • Strengthen of healthy nutrition promoting environment in schools, workplaces, clinics and hospitals  
  • Work with food industry and restaurants to reduce portion sizes for food prepared outside the home  
  • Require that restaurants and fast food outlets supply nutrition information on foods served  
  • Establish a system of healthy food certification for packaged foods through Caribbean Food and Nutrition Institute  
  • Promote taxes and subsidies to improve the affordability of healthier food products and discourage the consumption of less healthy options.  
  • Promote the drinking of water  
  • Implement WHO set of recommendations on the marketing of foods and non-alcoholic beverages to children  
  • Implement food-labeling standards for all pre-packaged foods.                                                                                                                                                                                                         | Phase 1  | % increase in obesity levels | Halt the rise in obesity     | MOH MOA BSJ                             |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                  | Phase 2  |                        |                               |                                         |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                  | Phase 2  |                        |                               |                                         |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                  | Phase 2  |                        |                               |                                         |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                  | Phase 2  |                        |                               |                                         |
## Objective 4: Reduce the number of people who developing infectious disease-related cancers

<table>
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<tr>
<th>Strategy</th>
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<th>Indicator</th>
<th>Target</th>
<th>Lead Agency or Institution Responsible</th>
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<tbody>
<tr>
<td></td>
<td>Reduce exposure to HPV and Hepatitis B infections</td>
<td></td>
<td></td>
<td></td>
<td>MOH</td>
</tr>
<tr>
<td></td>
<td>• Promote safer sex practices and delaying the onset of sexual activity.</td>
<td></td>
<td></td>
<td></td>
<td>MOE</td>
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<tr>
<td></td>
<td>• Support Family Health Unit in initiatives to improve and maintain coverage for hepatitis B vaccination</td>
<td></td>
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<td></td>
<td>• Advocate for the implementation of HPV vaccine adolescent for girls and boys.</td>
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<td></td>
<td>• Support the Prevention of Blood-borne infections programme (POEBI)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Phase 2</td>
<td>Phase 2</td>
<td>Hepatitis B vaccine coverage</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phase 1</td>
<td>Phase 1</td>
<td>HPV vaccine introduced into National vaccine programme.</td>
<td></td>
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<tr>
<td></td>
<td>Phase 2</td>
<td>Phase 2</td>
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</table>
Objective 5: Reduce the number of people developing cancer due to exposure to occupational, environmental carcinogens and radiation.

<table>
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<tr>
<th>Strategy</th>
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<th>Indicator</th>
<th>Target</th>
<th>Lead Agency or Institution Responsible</th>
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</thead>
<tbody>
<tr>
<td>Prevent exposure to occupational carcinogens</td>
<td>Develop regulatory standards and enforce control of the use of known carcinogens in the workplace</td>
<td>Phase 2</td>
<td>Number of persons exposed to occupational, carcinogens and radiation.</td>
<td>5% decrease in persons exposed to occupational carcinogens.</td>
<td>MOH, MLSS</td>
</tr>
<tr>
<td></td>
<td>Assess occupational cancer risks</td>
<td>Phase 1</td>
<td>Regulatory standards developed.</td>
<td></td>
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<tr>
<td></td>
<td>Implement registry of occupational exposures to carcinogens and exposed workers</td>
<td>Phase 1</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Work with OSH</td>
<td>Phase 2</td>
<td></td>
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<tr>
<td></td>
<td>Identify workers, workplaces and worksites with exposure to carcinogens</td>
<td>Phase 2</td>
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<tr>
<td></td>
<td>Train workers and managers in controlling occupational carcinogens</td>
<td>Phase 1</td>
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<tr>
<td>Prevent exposure to environmental carcinogens</td>
<td>Establish baseline of person exposed to environmental carcinogens.</td>
<td>Phase 1</td>
<td>Number of persons exposed to environmental carcinogens and radiation.</td>
<td>5% decrease in persons exposed to environmental carcinogens.</td>
<td>MOH, NEPA, MOH</td>
</tr>
<tr>
<td></td>
<td>Introduce regulations to restrict trade and use of known human carcinogens</td>
<td>Phase 2</td>
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<td></td>
<td>enforce requirements to prevent release into the environment of carcinogens from industrial, transport and agricultural sources</td>
<td>Phase 2</td>
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<td></td>
<td>Investigate which techniques of preparing traditional, home-cooked foods increase risk of contamination with carcinogens.</td>
<td>Phase 2</td>
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<td></td>
<td>Strengthen national capacities to establish links between cancer morbidity and environmental</td>
<td>Phase 2</td>
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<td>Strategy</td>
<td>Activity</td>
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<td>Indicator</td>
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<td>Lead Agency or Institution Responsible</td>
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<tr>
<td>pollution</td>
<td>Organize monitoring of persistent organic pollutants and other environmental pollutants with carcinogenic effects</td>
<td>Phase 2</td>
<td></td>
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<tr>
<td></td>
<td>Implement efficient food safety systems to control all possible cancer hazards in food and provide concise consumer education material</td>
<td>Phase 2</td>
<td></td>
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<tr>
<td>prevent exposure to radiation</td>
<td>Provide information about sources and effects of all types of radiation</td>
<td>Phase 2</td>
<td>Number of persons reported on registry of radiation workers % of workers with abnormal personal dose readings</td>
<td>5 % of workers with abnormal personal dose readings</td>
<td>MOH NEPA MOH</td>
</tr>
<tr>
<td></td>
<td>Organize a national dose registry of radiation workers (ionizing radiation)</td>
<td>Phase 2</td>
<td></td>
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<td></td>
<td>Develop and promote guidelines to ensure appropriate application of medical radiation</td>
<td>Phase 2</td>
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<td></td>
<td>Implement regular safety training of radiation workers</td>
<td>Phase 1</td>
<td></td>
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<td></td>
<td>Strengthen personal dose monitoring of radiation workers</td>
<td>Phase 1</td>
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</table>
2013

Priority AREA #2 EARLY DETECTION (SCREENING & EARLY DIAGNOSIS)

STRATEGIC OBJECTIVE: Identify cancer at its earliest stages through effective screening and early detection

Objective 1:

1. To ensure that prioritized early detection services are provided in an integrated, equitable and sustainable way.

2. To increase to over 80% the awareness of early signs and symptoms of most common cancers among public and health-care providers

3. To achieve through the early detection strategy, early referral and prompt treatment in specialized clinics for over 80% of cervix, breast, prostate, colorectal and stomach cancer patients.

4. To reduce late presentation at diagnosis by 50% in persons with cervix, breast, prostate, colorectal and stomach cancer

5. To increase by 30% the 5-year survival of patients with cervical and breast cancer
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</table>
| Increase cancer knowledge and awareness of public and health care workers | • Develop and implement social marketing campaign to increase knowledge and awareness of the importance of screening and early detection.  
• Train health workers in the screening and early detection of cancer.                                                                 | Phase 1           | awareness of early signs and symptoms of cervical and breast cancers among patients and health-care providers | > 80%   | MOH RHA                                |
| Strengthen health system with focus on Primary Health Care              | • Strengthen/establish screening and/or early diagnosis programmes for cervix, breast, prostate and colorectal cancer in primary health care.  
• Introduce Visual Inspection with Acetic Acid and HPV testing as apart of the algorithm for cervical cancer screening.  
• Strengthen laboratory cytology services  
• Provide Prostatic Specific Antigen tests and fecal occult blood tests in Primary Health Care.  
• Establish colposcopy service at all parish hospitals and/or select health centres  
• Establish screening mammography service at the 4 Regional Hospitals  
• Integrate cancer screening into existing curative clinics, family planning, and HIV/AIDS clinics.  
• Strengthen referral, counter-referral and follow-up of clients  
• Advocate for routine cancer screening to be included in health insurance package. | Phase 1, Phase 2 | % persons detected early and referred for cervix, breast, prostate, colorectal and stomach cancer patients. | > 80%   | MOH RHA                                |
Priority AREA #3 DIAGNOSIS AND TREATMENT

STRATEGIC OBJECTIVE: Improve the accessibility, availability and quality of cancer diagnostic and treatment services and programmes

Objective:

1. To provide diagnosis and treatment and rehabilitation as necessary for all disseminated cancers with high potential of being cured or significantly prolonging life
2. To achieve early referral and adequate diagnosis and treatment in specialized clinics for over 70% of all patients, identified by the early detection strategy.
3. To provide education and support to over 70% of patients diagnosed with cancer
4. To increase by 30% the 5-year survival rate of patients with cancers that can be detected early
5. To achieve over 40% cure rates in children with acute lymphatic leukaemia and Hodgkin lymphoma
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<th>Target</th>
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</table>
| Strengthen cancer diagnostic services | • Upgrade radiological services for cancer diagnosis at Regional Hospitals and Bustamante Hospital for Children  
• Strengthen laboratory services to ensure the timely confirmation of cancer in keeping with the laboratory Modernization project and Strategic Plan.  
• Reestablish Nuclear Medicine Programme in Public Sector | Phase 1  
Phase 1  
Phase 2 | Radiological services upgraded.  
Laboratory services strengthened | Radiological services upgraded.  
Laboratory services strengthened | MOH  
NPHL  
RHA |  
| Strengthen cancer treatment services. | • Establish clinical guidelines for adult and paediatric cancers.  
• Strengthen and upgrade existing cancer treatment specialist sites at Cornwall Regional Hospital, Bustamante Children’s Hospital, Kingston Public Hospital, Hope Institute and University Hospital of the West Indies.  
• Expand specialist sites to include Mandeville Regional Hospital and St. Ann’s Bay Hospital.  
• Reestablish Nuclear Medicine Programme in Public Sector  
• Upgrade Radiotherapy services by:  
  o Installing a linear accelerator at CRH and KPH  
  o Establish brachytherapy at CRH and KPH | Phase 1  
Phase 1  
Phase 2 | % of patients early referral and adequate diagnosis and treatment  
% 5-year survival rate of patients with cancers that can be detected early  
% cure rates in children with acute lymphatic leukaemia and Hodgkin lymphoma | > 70%  
30%  
40% | MOH  
RHA  
UWHI |
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<tr>
<th>Strategy</th>
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</table>
| Increase awareness among the public and providers of standards of care for effective treatment and quality cancer care. | - Training health care providers in clinical management of cancer in adults and children based on national guidelines.  
- Develop patient information on diagnosis and treatment of cancer for patients.  
- Establish/upgrade Telemedicine service at UHWI, KPH, BCH and CRH for case management.  
- Establish partnership with leading Cancer care training institution to support training/mentorship in cancer care. | Phase 1  
Phase 1  
Phase 2  
Phase 2 | - % of health care workers trained in the management of cancer in adults and children.  
- # of telemedicine sites established. | 80%  
4 telemedicine sites established |
**Priority AREA #3 SUPPORTIVE, REHABILITATIVE, PALLATIVE CARE**

**STRATEGIC OBJECTIVE:** To improve the quality of life of persons living with and affected by cancer through the provision of rehabilitative, supportive and palliative care in an integrated, equitable and sustainable way.

Objective:

1. To ensure that at least 30% of advanced cancer patients nationwide get relief from pain and other physical, psychosocial and spiritual problems.

2. To provide supportive and rehabilitative services to cancer patients.

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</thead>
</table>
| Increase access to support and rehabilitative services | • Strengthen rehabilitative and support services  
• Develop plan to improve access to support and rehabilitative services. | Phase 1  | Rehabilitative services strengthened. | Rehabilitative services strengthened. | Ministry of Health |

| Provide palliative care at all levels of care with emphasis on primary health-care and home-based care. | • Establish Hope Institute as reference centre for training in palliative care.  
• Develop National standard/protocol for palliative care.  
• Train health care providers at all levels in palliative care.  
• Establish palliative care teams at all levels of care with an emphasis on primary health care and home-based care.  
• Ensure access to oral morphine and other | Phase 1  | Number and type of trained health-care professionals at the different levels of care qualified to provide palliative care according to established standards | At least 50% | Ministry of Health RHAs |
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<tr>
<td></td>
<td></td>
<td></td>
<td>Proportion of advanced cancer patients who get palliative care according to established standards</td>
<td>&gt; 80%</td>
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<td></td>
<td></td>
<td></td>
<td>Proportion of advanced cancer patients receiving home-based care provided by trained caregivers</td>
<td>&gt; 80%</td>
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<td></td>
<td></td>
<td>% of advanced cancer patients nationwide get relief from pain and other physical, psychosocial and spiritual problems</td>
<td>30%</td>
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</table>
2013

Priority AREA #4 HUMAN RESOURCE CAPACITY BUILDING & PROGRAMME MANAGEMENT

**STRATEGIC OBJECTIVE:** To reorient health care sector to support the delivery of services throughout the cancer care continuum.

**Objective:**
1. To recruit and retain at least 80% of workforce for cancer care.
2. To strengthen the human resource capacity to delivery cancer care.
3. To develop training plan for Cancer control in Jamaica
4. To plan, monitor and coordinate the response to Cancer prevention and control in Jamaica.

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<th>Indicator</th>
<th>Target</th>
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<tbody>
<tr>
<td>Address immediate HR needs</td>
<td>Recruit the following categories:</td>
<td>Phase 1</td>
<td>% essential staff recruited.</td>
<td>50% essential staff recruited in year one</td>
<td>Ministry of Health RHA Human Resource Department</td>
</tr>
<tr>
<td>recruitment international and local</td>
<td>• 1 Paediatric Oncologist for Bustamante Children’s Hospital</td>
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<td>100% essential staff recruited in year two</td>
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<td></td>
<td>• Six Consultant Pathologist for National Public Health laboratory</td>
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<td></td>
<td>• 1 Cytopathologist</td>
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<td></td>
<td>• 4 Cytotechnologist</td>
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<td></td>
<td>• 4 Social Worker</td>
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<td></td>
<td>• 4 Counsellors</td>
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<td></td>
<td>• 1 Radiologist and 1 technician</td>
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<tr>
<td></td>
<td>• 1 National Cancer Surveillance Officer and 4 Regional Officers</td>
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<tr>
<td>Strategy</td>
<td>Activity</td>
<td>Timeline</td>
<td>Indicator</td>
<td>Target</td>
<td>Lead Agency or Institution Responsible</td>
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<tr>
<td>Address long-term HR needs</td>
<td>Develop human resource plan to support Cancer control continuum</td>
<td>Phase 1</td>
<td>Human resource plan established to support Cancer Control. Training programme developed and implemented.</td>
<td>50% recruited based on plan.</td>
<td>RHA, Human Resource Department</td>
</tr>
<tr>
<td></td>
<td>Develop and implement cancer care training programme for healthcare workers at all levels focus on the cancer care continuum.</td>
<td>Phase 2</td>
<td>Training programme developed and implemented.</td>
<td>Training programme developed and implemented.</td>
<td>RHA, Human Resource Department</td>
</tr>
<tr>
<td>Build capacity of oncology and non-oncology health care providers</td>
<td>Convene National Cancer Technical Working Group and NCD Subcommittee meetings to monitor and provide oversight for implementation of plan</td>
<td>Phase 2</td>
<td>Number of meetings held</td>
<td>At least 4 meetings per annum</td>
<td>MOH</td>
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<tr>
<td>Coordinate and management of cancer response</td>
<td></td>
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<td>RHA</td>
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**2013**  
**Priority AREA #5 CANCER SURVEILLANCE AND RESEARCH**

**STRATEGIC OBJECTIVE:** To ensure and evidenced based approach to cancer control through cancer surveillance and research.

**Objective:**

1. To strengthen information for the monitoring and evaluation of cancer control programme.

| Strategy                        | Activity                                                                 | Timeline | Indicator                                        | Target                                      | Lead Agency or Institution Responsible |
|---------------------------------|                                                                        |          |                                                |                                            |                                        |
| Establish National Cancer Registry | Establish a National Cancer Registry  
Make Cancer a reportable disease  
Report on epidemiology of cancer in Jamaica  
Utilize data for policy and programming  
Integrate Cancer information into National Health Information System | Phase 1  
Phase 1  
Phase 2  
Phase 2 | National Cancer Registry established.  
National Cancer Registry Established. | Ministry of Health RHA Human Resource Department |
| Promote Cancer Research          | Develop cancer research agenda.  
Share and collaborate with Academia and International organizations on cancer research | Phase 1  
Phase 2 | Research agenda developed.  
Number of cancer research projects implemented. | Research agenda developed.  
2 cancer Research projects per annum | MOH Academic Institutions |
**LIST OF ABBREVIATIONS  (TO BE INSERTED ONCE FINAL)**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
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<tr>
<td>NGOs</td>
<td>Non-governmental Organizations</td>
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<tr>
<td>NHF</td>
<td>National Health Fund</td>
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<td>PAHO</td>
<td>Pan American Health Organization</td>
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<td>RGD</td>
<td>Registrar General Department</td>
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<td>RHA</td>
<td>Regional Health Authority</td>
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<td>SCD</td>
<td>Sickle Cell Disease</td>
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<td>STATIN</td>
<td>Statistical Institute of Jamaica</td>
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<tr>
<td>STD</td>
<td>Sexually Transmitted Disease</td>
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<tr>
<td>STEPS</td>
<td>STEPwise approach to surveillance (STEPS)</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>US</td>
<td>United States</td>
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<td>USA</td>
<td>United States of America</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WIMJ</td>
<td>West Indian medical Journal</td>
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</table>
ACKNOWLEDGEMENTS AND CONTRIBUTORS

Acknowledgements

The Ministry of Health wishes to thank participants in the various regional stakeholder consultations, for their participation and suggestions with regards to Jamaica’s NCD response. Thanks also to persons who gave individual interviews and those who participated in site visits as the strategic plan was being developed.

Main contributors

Cancer Control Technical Working Group (to insert names)
APPENDICES

Appendix 1: DECLARATION OF PORT-OF -SPAIN: UNITING TO STOP THE EPIDEMIC OF CHRONIC NCDs

Appendix 2: DECLARATION OF ST. ANN Implementing Agriculture and Food Policies to prevent Obesity and Non-Communicable Diseases (NCDs) in the Caribbean Community
**APPENDIX 1: DECLARATION OF PORT-OF-Spain: UNITING TO STOP THE EPIDEMIC OF CHRONIC NCDS**

We, the Heads of Government of the Caribbean Community (CARICOM), meeting at the Crowne Plaza Hotel, Port-of-Spain, Trinidad and Tobago on 15 September 2007 on the occasion of a special Regional Summit on Chronic Non-Communicable Diseases (NCDs);

Conscious of the collective actions which have in the past fuelled regional integration, the goal of which is to enhance the well-being of the citizens of our countries;

Recalling the Nassau Declaration (2001), that “the health of the Region is the wealth of Region”, which underscored the importance of health to development;

Inspired by the successes of our joint and several efforts that resulted in the Caribbean being the first Region in the world to eradicate poliomyelitis and measles;

Affirming the main recommendations of the Caribbean Commission on Health and Development which included strategies to prevent and control heart disease, stroke, diabetes, hypertension, obesity and cancer in the Region by addressing their causal risk factors of unhealthy diets, physical inactivity, tobacco use and alcohol abuse and strengthening our health services;

Impelled by a determination to reduce the suffering and burdens caused by NCDs on the citizens of our Region which is the one worst affected in the Americas;

Fully convinced that the burdens of NCDs can be reduced by comprehensive and integrated preventive and control strategies at the individual, family, community, national and regional levels and through collaborative programmes, partnerships and policies supported by governments, private sectors, NGOs and our other social, regional and international partners;

Declare -

1. • Our full support for the initiatives and mechanisms aimed at strengthening regional health institutions, to provide critical leadership required for implementing our agreed strategies for the reduction of the burden of Chronic, Non-Communicable Diseases as a central priority of the Caribbean Cooperation in Health Initiative Phase III (CCH III), being coordinated by the CARICOM Secretariat, with able support from the Pan American Health Organisation/World Health Organisation (PAHO/WHO) and other relevant partners;

2. • That we strongly encourage the establishment of National Commissions on NCDs or analogous bodies to plan and coordinate the comprehensive prevention and control of chronic NCDs;

3. • Our commitment to pursue immediately a legislative agenda for passage of the legal provisions related to the International Framework Convention on Tobacco Control; urge its immediate ratification in all States which have not already done so and support the immediate enactment of legislation to limit or eliminate smoking in public places, ban the sale, advertising and promotion of tobacco products to children, insist on effective warning labels and introduce such fiscal measures as will reduce accessibility of tobacco;

4. • That public revenue derived from tobacco, alcohol or other such products should be employed, inter alia for preventing chronic NCDs, promoting health and supporting the work of the Commissions;

5. • That our Ministries of Health, in collaboration with other sectors, will establish by mid-2008 comprehensive plans for the screening and management of chronic diseases and risk factors so that by
2012, 80% of people with NCDs would receive quality care and have access to preventive education based on regional guidelines;

6. • That we will mandate the re-introduction of physical education in our schools where necessary, provide incentives and resources to effect this policy and ensure that our education sectors promote programmes aimed at providing healthy school meals and promoting healthy eating;

7. • Our endorsement of the efforts of the Caribbean Food and Nutrition Institute (CFNI), Caribbean Agricultural Research and Development Institute (CARDI) and the regional inter-governmental agencies to enhance food security and our strong support for the elimination of trans-fats from the diet of our citizens, using the CFNI as a focal point for providing guidance and public education designed toward this end;

8. • Our support for the efforts of the Caribbean Regional Negotiating Machinery (CRNM) to pursue fair trade policies in all international trade negotiations thereby promoting greater use of indigenous agricultural products and foods by our populations and reducing the negative effects of globalisation on our food supply;

9. • Our support for mandating the labeling of foods or such measures as are necessary to indicate their nutritional content through the establishment of the appropriate regional capability;

10. • That we will promote policies and actions aimed at increasing physical activity in the entire population, e.g. at work sites, through sport, especially mass activities, as vehicles for improving the health of the population and conflict resolution and in this context we commit to increasing adequate public facilities such as parks and other recreational spaces to encourage physical activity by the widest cross-section of our citizens;

11. • Our commitment to take account of the gender dimension in all our programmes aimed at the prevention and control of NCDs;

12. • That we will provide incentives for comprehensive public education programmes in support of wellness, healthy life-style changes, improved self-management of NCDs and embrace the role of the media as a responsible partner in all our efforts to prevent and control NCDs;

13. • That we will establish, as a matter of urgency, the programmes necessary for research and surveillance of the risk factors for NCDs with the support of our Universities and the Caribbean Epidemiology Centre/Pan American Health Organisation (CAREC/PAHO);

14. • Our continuing support for CARICOM and PAHO as the joint Secretariat for the Caribbean Cooperation in Health (CCH) Initiative to be the entity responsible for revision of the regional plan for the prevention and control of NCDs, and the monitoring and evaluation of this Declaration.

15. We hereby declare the second Saturday in September “Caribbean Wellness Day,” in commemoration of this landmark Summit.
APPENDIX 2: DECLARATION OF ST. ANN

Implementing Agriculture and Food Policies to prevent Obesity and Non-Communicable Diseases (NCDs) in the Caribbean Community

We, the Ministers of Agriculture of CARICOM, meeting at the Gran Bahia Principe Hotel, Runaway Bay, St. Ann, Jamaica on 9 October 2007 on the occasion of a special Symposium on Food and Agriculture Policies and Obesity: Prevention of NCDs in the Caribbean;

Recalling the 1996 declaration in The Bahamas of the region’s Ministers of Agriculture that “Food and nutritional security in the Caribbean is also related to chronic nutritional life style diseases [NCDs] such as obesity, stroke and heart attack”, and the 2007 Heads of Government Declaration of Port of Spain in which a commitment was made, “to provide critical leadership required for implementing…agreed strategies for the reduction of the burden of Chronic, Non-Communicable Diseases as a central priority of the Caribbean Cooperation in Health Initiative …”;

Affirming the main recommendations of the Caribbean Commission on Health and Development which included strategies to prevent and control heart disease, stroke, diabetes, hypertension, obesity and cancer in the Region by addressing their causal risk factors of unhealthy diets, physical inactivity, tobacco use and alcohol abuse and strengthening our health and agricultural policies;

Impelled by a determination to reduce the suffering and burdens caused by NCDs through the promotion and implementation of effective food and agricultural policies as part of our overall development plans;

Fully convinced that the burdens of NCDs can be reduced by comprehensive and integrated preventive and control strategies at the individual, family, community, national and regional levels and through collaborative programmes, partnerships and policies supported by governments, private sectors, NGOs and our other social, regional and international partners;

Declare –
- Our full support for the initiatives and mechanisms aimed at strengthening regional health and agricultural institutions, to provide critical leadership required for implementing our agreed strategies for the reduction of the burden of Chronic, Non-Communicable Diseases as a central priority of the Caribbean Cooperation in Health Initiative Phase III (CCH III), being coordinated by the CARICOM Secretariat, with able support from the Pan American Health Organization/World Health Organization (PAHO/WHO) and other relevant partners;
• Our determination to exhaust all options within Regional and WTO agreements to ensure the availability and affordability of healthy foods;

• Our support for the efforts of the Caribbean Regional Negotiating Machinery (CRNM) to pursue fair trade policies in all international trade negotiations thereby promoting greater use of indigenous agricultural products and foods by our populations and reducing the negative effects of globalization on our food supply;

• Our commitment to develop food and agriculture policies that explicitly incorporate nutritional goals including the use of dietary guidelines in designing food production strategies;

• That we will explore the development of appropriate incentives and disincentives that encourage the production and consumption of regionally produced foods, particularly fruits and vegetables;

• That we will establish, as a matter of urgency, the programmes necessary for research and surveillance on the aspects of agricultural policy and programmes that impact on the availability and accessibility of foods that affect obesity and NCDs;

• Our support for the establishment of formal planning linkages between the agriculture sector and other sectors (especially, health, tourism, trade and planning) in order to ensure a more integrated and coordinated approach to policy and programme development aimed at reducing obesity;

• Our strong support for the elimination of trans-fats from our food supply using CFNI as a focal point for providing guidance and public education designed toward this end;

• Our support for mandating the labeling of foods or such measures necessary to indicate their nutritional content;

• That we will advocate for incentives for comprehensive public education programmes in support of wellness and increased consumption of fruits and vegetables and embrace the role of the media as a partner in all our efforts to prevent and control NCDs;

Our continuing support for CARICOM, CFNI/PAHO, FAO, IICA and CARDI as the entities responsible for leading the development of the regional Food Security Plan for the prevention and control of NCDs, and the monitoring and evaluation of this Declaration.