COUNTRY PROFILES

ON NONCOMMUNICABLE DISEASES







COUNTRY PROFILES ON NONCOMMUNICABLE DISEASES





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INTRODUCTION

This compendium of country profiles summarizes the epidemiological situation and capacity within Ministries of Health for noncommunicable disease prevention and control (NCD) in Latin America and the Caribbean (LAC). National NCD program managers from Ministries of Health who were designated to participate in the CARMEN 2012 biennial meeting provided the country capacity information contained in this report, by responding to a written survey conducted by the Pan American Health Organization (PAHO) between March – April, 2012. Information presented in these reports is also from the PAHO publication NCDs: Basic Indicators, 2011 as well as the PAHO mortality database. Each country profile provides demographic information, data on NCD risk factors and premature mortality, national policies and plans, surveillance, health services and medicines related to NCDs.





NCDs IN ANTIGUA AND BARBUDA

Sociodemographic indicators



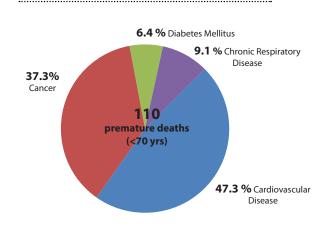
- Total population (thousands): 87.9
- Average annual deaths (thousands): 0.5
- Life expectancy at birth (years):

Total: **75.5** Male: **73.5** Female: **77.6**

- Adult literacy rate (%): 99.0
- Gross National Income US\$ per capita: 12,130.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 22.0 % of all deaths

RISK FACTORS

SURVEILLANCE

Is there a budget?

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | | |
| Adolescent tobacco smokers | 7.4 | 8.2 | 6.1 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 26.7 | 30.7 | 21.4 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 68.2 | 63.5 | 73.0 |
| Overweight among adults (BMI 25-29.9) | 59.0 | 54.4 | 63.3 |
| Obesity among adults (BMI ≥30) | 25.8 | 18.1 | 33.1 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 42.4 | 47.1 | 37.8 |

Notes: a: % who eat \le 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

Note: N/A: Not applicable.

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | No |
| Budget? | No |
| Measurable outcomes? | N/A |
| Monitoring and evaluation component? | N/A |
| Communications component? | N/A |
| Are there plans for specific diseases? | Yes |

| Is there dedicated staff? | Yes |
|---|-----|
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | No |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

No

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | ✓ | |
| Blood pressure | Yes | Ø | |
| Blood glucose | Yes | Ø | |
| Blood lipids | Yes | | ⊘ |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | Ø | |
| Blood lipids monitoring | Yes | Ø | |
| HbA1C | Yes | | ✓ |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | | ✓ |

| | | Free? | |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | Ø | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | No | Not ap | plicable |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | | \bigcirc |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | Ø | |

SPECIALIZED CARE

| | | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | | | |
| Diagnostic mammography | Yes | | \bigcirc | |
| Chemotherapy | Yes | \bigcirc | | |
| Radiotherapy | No | Not ap | plicable | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | No | Not ap | plicable | |
| Angioplasty | No | Not ap | plicable | |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | |
| Photocoagulation for retinopahty | No | Not ap | plicable |
| Dialysis | Yes | \bigcirc | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \bigcirc | |
| Aspirin | Yes | \bigcirc | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | \checkmark | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | Ø | |

| | Available? | Free? | |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | \bigcirc | |
| Statins | Yes | Ø | |
| Tamoxifen | Yes | ⊘ | |
| Oral morphine | Yes | \bigcirc | |

Sources

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Ena Henry, Statistician/NCDs Focal Point, Ministry of Health, Antigua & Barbuda.



NCDs IN ARGENTINA

Sociodemographic indicators



Total population (thousands): 40,764.6

Average annual deaths (thousands): 315.6

Life expectancy at birth (years):

Total: **76.0** Male: **72.2** Female: **79.7**

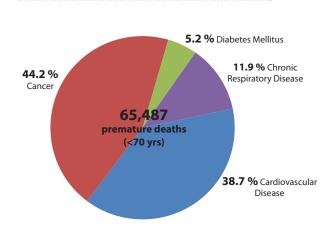
Adult literacy rate (%): 97.7

Gross National Income US\$ per capita: 7,550.0

% of population covered by any type health insurance: **62.0**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 20.8 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 30.5 | 35.8 | 25.9 |
| Adolescent tobacco smokers | 24.5 | 21.1 | 27.3 |
| Fruit and vegetable intake in adults ^a | 4.6 | 4.1 | 5.0 |
| Fruit and vegetable intake in adolescents ^a | 14.0 | 13.6 | 14.4 |
| Binge drinking among adults | 8.4 | 14.3 | 3.2 |
| Low physical activity in adults ^b | 54.5 | 52.2 | 56.5 |
| Low physical activity in adolescents ^c | 78.5 | 70.8 | 85.1 |
| Overweight among adults (BMI 25-29.9) | 36.7 | 45.9 | 28.4 |
| Obesity among adults (BMI ≥30) | 20.5 | 22.0 | 19.0 |
| Overweight among adolescents (BMI>+1SD) | 17.2 | 18.8 | 12.7 |
| Obesity among adolescents (BMI>+2SD) | 2.2 | 1.8 | 2.7 |
| Children <5 overweight | 9.9 | | |
| Adults with diabetes mellitus | 9.0 | 8.0 | 9.9 |
| Adults with raised BP and/or taking medication | 32.3 | 31.7 | 32.8 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days;

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |
| | |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | Free? | | |
|---|------------|--------------|-------------------|--|--|
| | Available? | All patients | Limited resources | | |
| CVD RISK ASSESSMENT | | | | | |
| BMI | Yes | \bigcirc | | | |
| Blood pressure | Yes | \bigcirc | | | |
| Blood glucose | Yes | \bigcirc | | | |
| Blood lipids | Yes | \bigcirc | | | |
| Individual risk management with a validated CV risk score | Yes | ⊘ | | | |
| DM AND CVD MANAGEMEN | IT | | | | |
| Blood pressure monitoring | Yes | \checkmark | | | |
| Blood glucose monitoring | Yes | ⊘ | | | |
| Blood lipids monitoring | Yes | \bigcirc | | | |
| HbA1C | Yes | Ø | | | |
| Diabetic foot examination | Yes | \bigcirc | | | |
| Electrocardiogram | Yes | Ø | | | |

| | _ | |
|------------|--------------------------------|---|
| Available? | | ee? |
| | patients | Limited resources |
| | | |
| Yes | \checkmark | |
| Yes | \checkmark | |
| Yes | Ø | |
| No | Not ap | plicable |
| | | |
| Yes | $ \bigcirc $ | |
| Yes | Not s _i | pecified |
| | | |
| Yes | | |
| Yes | ⊘ | |
| | Yes Yes No Yes Yes Yes Yes Yes | Yes Yes Yes No Not ap Yes Yes Yes Yes Yes Yes |

Notes: HPV: Human Papillomavirus; DM: Diabetes meilitus; CVD: Cardiovascular disease Cardiovascular

SPECIALIZED CARE

| | Available? | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|
| | | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | \bigcirc | | |
| Diagnostic mammography | Yes | | | |
| Chemotherapy | Yes | \bigcirc | | |
| Radiotherapy | Yes | \bigcirc | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | | | |
| Angioplasty | Yes | Ø | | |

| | | Free? | | |
|--|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| DIABETES MANAGEMENT | | | | |
| Eye exams | Yes | \bigcirc | | |
| Photocoagulation for retinopahty | Yes | ⊘ | | |
| Dialysis | Yes | \bigcirc | | |
| OTHER | | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | | \bigcirc |
| Metformin | Yes | | \bigcirc |
| Glibenclamide | Yes | | \bigcirc |
| Thiazide diuretics | Yes | | ✓ |
| ACE inhibitors | Yes | | Ø |

| | Available? | Free? | |
|------------------------------|------------|----------------|--------------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | No | Not applicable | |
| Beta blockers | Yes | Not specified | |
| Statins | No | Not | applicable |
| Tamoxifen | Yes | | $\overline{\mathscr{O}}$ |
| Oral morphine | Yes | | ⊘ |

Sources

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 20 Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Sebastián Laspiur, Health Promotion and NCDs Director, Ministry of Health, Argentina.



NCDs IN BAHAMAS

Sociodemographic indicators



Total population (thousands): 347.2

Average annual deaths (thousands): 1.9

Life expectancy at birth (years):

Total: **75.7** Male: **72.5** Female: **78.6**

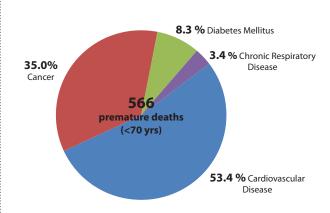
Adult literacy rate (%): ...

Gross National Income US\$ per capita: ...

% of population covered by any type health insurance: 51.4

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<**70 yrs**) account for **29.8** % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 43.0 | 51.6 | 27.0 |
| Adolescent tobacco smokers | 1.6 | 1.4 | 1.7 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 33.9 | 35.0 | 22.7 |
| Obesity among adults (BMI ≥30) | 53.0 | 42.5 | 60.5 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | 9.2 | 8.6 | 9.6 |
| Adults with raised BP and/or taking medication | 37.5 | 37.0 | 38.4 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | No |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |
| Notes: N/A: Not available. | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \checkmark | |
| Blood pressure | Yes | | |
| Blood glucose | Yes | | \bigcirc |
| Blood lipids | Yes | | \bigcirc |
| Individual risk management with a validated CV risk score | Yes | | Ø |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | | \bigcirc |
| Blood lipids monitoring | Yes | | \bigcirc |
| HbA1C | Yes | | ✓ |
| Diabetic foot examination | Yes | | ✓ |
| Electrocardiogram | Yes | | ✓ |

| | | Free? |
|-------------------------------------|------------|-------------------------------|
| | Available? | All Limited patients resource |
| CERVICAL CANCER | | |
| Cervical cytology or PAP | Yes | Ø |
| HPV DNA testing | Yes | Not specified |
| Visual inspection techniques (VIA) | Yes | Not specified |
| VIA & cryotherapy in a single visit | Yes | Not specified |
| BREAST CANCER | | |
| Clinical examination | Yes | \checkmark |
| Mammography | Yes | Not specified |
| COLORECTAL CANCER | | |
| Fecal occult blood test | Yes | ⊘ |
| Digital exam | Yes | ⊘ |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; C Cardiovascular

SPECIALIZED CARE

| | Available? | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | \checkmark |
| Diagnostic mammography | Yes | | Ø |
| Chemotherapy | Yes | | \checkmark |
| Radiotherapy | Yes | | \bigcirc |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | | |
| Angioplasty | Yes | | ⊘ |

| | Available? | Free | | ee? |
|--|------------|--------------|-------------------|-----|
| | | All patients | Limited resources | |
| DIABETES MANAGEMENT | | | | |
| Eye exams | Yes | | | |
| Photocoagulation for retinopahty | Yes | | ⊘ | |
| Dialysis | Yes | | ⊘ | |
| OTHER | | | | |
| Home care for patients with terminal or advanced disease | Yes | | | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | | \checkmark |
| Aspirin | Yes | | \checkmark |
| Metformin | Yes | | \checkmark |
| Glibenclamide | Yes | | \checkmark |
| Thiazide diuretics | Yes | | \bigcirc |
| ACE inhibitors | Yes | | ⊘ |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | | ✓ |
| Statins | Yes | | \bigcirc |
| Tamoxifen | Yes | | ✓ |
| Oral morphine | Yes | | Ø |

Sources:

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Delon Brennen, Deputy Chief Medical Officer, Ministry of Health, Bahamas.



NCDs IN BARBADOS

Sociodemographic indicators



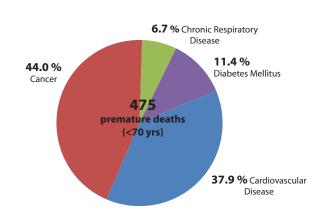
- Total population (thousands): 286.7
- Average annual deaths (thousands): 2.4
- Life expectancy at birth (years):

Total: **74.3** Male: **72.1** Female: **76.6**

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: ...
- % of population covered by any type health insurance: 25.0

Burden of disease

PREMATURE DEATHS (2006)



Premature deaths from NCDs (<70 yrs) account for 20.4 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 8.4 | 15.2 | 2.2 |
| Adolescent tobacco smokers | 11.6 | 14.3 | 9.3 |
| Fruit and vegetable intake in adults ^a | 4.6 | 3.4 | 5.7 |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | | 21.9 | 9.7 |
| Low physical activity in adults ^b | 51.3 | 42.5 | 59.0 |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 36.7 | 34.3 | 38.8 |
| Obesity among adults (BMI ≥30) | 28.5 | 20.3 | 35.5 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 5.7 | | |
| Adults with diabetes mellitus | 11.7 | 10.4 | 11.7 |
| Adults with raised BP and/or taking medication | 29.1 | 23.0 | 34.7 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |
| | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \checkmark | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | \bigcirc | |
| Blood lipids | Yes | \bigcirc | |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | Yes | \checkmark | |
| HbA1C | Yes | | |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | Ø | |

| | | Fre | e? |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not app | licable |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | No | Not app | licable |
| BREAST CANCER | | | |
| Clinical examination | Yes | \bigcirc | |
| Mammography | Yes | Ø | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | ⊘ | |

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | |
| Diagnostic mammography | Yes | \bigcirc | |
| Chemotherapy | Yes | \bigcirc | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | | |
| Angioplasty | Yes | | |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | ✓ | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | \checkmark | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | \bigcirc | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | Ø | |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | \checkmark | |
| Statins | Yes | | |
| Tamoxifen | Yes | ✓ | |
| Oral morphine | Yes | | |

Sources

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Kenneth S George, Senior Medical Official, Ministry of Health, Barbados.



NCDs IN BELIZE

Sociodemographic indicators



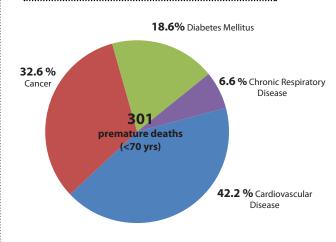
- Total population (thousands): 317.9
- Average annual deaths (thousands): 1.2
- Life expectancy at birth (years):

Total: **76.1** Male: **74.7** Female: **77.6**

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: 3,740.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 25.1 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 10.5 | 19.1 | 1.7 |
| Adolescent tobacco smokers | 26.7 | 36.2 | 18.6 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | 7.6 | 13.1 | 2.7 |
| Low physical activity in adults ^b | 42.7 | 40.4 | 45.0 |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 72.3 | 66.1 | 78.1 |
| Obesity among adults (BMI ≥30) | 37.9 | 26.7 | 48.8 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 13.7 | | |
| Adults with diabetes mellitus | 13.1 | 8.3 | 17.6 |
| Adults with raised BP and/or taking medication | 28.7 | 28.6 | 24.4 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| No |
|-----|
| N/A |
| No |
| N/A |
| N/A |
| N/A |
| N/A |
| No |
| |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | No |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | No |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | Available? | Fr | ee? |
|---|------------|--------------|-------------------|
| | | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | \bigcirc | |
| Blood lipids | Yes | \bigcirc | |
| Individual risk management with a validated CV risk score | No | Not ap | pplicable |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | Yes | \checkmark | |
| HbA1C | Yes | ⊘ | |
| Diabetic foot examination | Yes | ⊘ | |
| Electrocardiogram | Yes | Ø | |

| | | Fr | ee? |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | | ⊘ |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | | $ \checkmark $ |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | Ø | |

Cardiovascular.

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|----------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | Not sp | ecified |
| Diagnostic mammography | Yes | | \bigcirc |
| Chemotherapy | No | Not ap | plicable |
| Radiotherapy | No | Not applicable | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | No | Not ap | plicable |
| Angioplasty | No | Not ap | plicable |

| | Available? | Free? | |
|--|------------|-----------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \bigcirc | |
| Photocoagulation for retinopahty | No | Not ap | pplicable |
| Dialysis | Yes | | ✓ |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | pplicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \bigcirc | |
| Aspirin | Yes | \bigcirc | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | ✓ | |
| Thiazide diuretics | Yes | | |
| ACE inhibitors | Yes | ✓ | |

| | Available? | Free? | | |
|------------------------------|------------|--------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Calcium channels blockers | Yes | | | |
| Beta blockers | Yes | | | |
| Statins | Yes | | ⊘ | |
| Tamoxifen | Yes | No | ot specified | |
| Oral morphine | Yes | \bigcirc | | |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Aisha Andrewin, Epidemiologist & NCDs Focal Point, Ministry of Health, Belize.



NCDs IN BOLIVIA

Sociodemographic indicators



Total population (thousands): 10,088.1

Average annual deaths (thousands): 72.9

Life expectancy at birth (years):

Total: 66.8 Male: 64.5 Female: 69.1

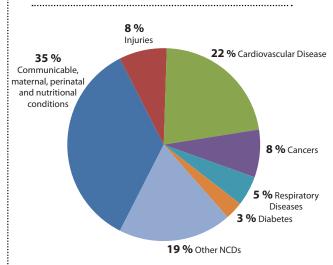
Adult literacy rate (%): 90.7

Gross National Income US\$ per capita: 1,630.0

% of population covered by any type health insurance: ...

Burden of disease

PROPORTIONAL MORTALITY (2008)*



NCDs are estimated to account for 57 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | 35.8 | 29.8 |
| Adolescent tobacco smokers | 20.8 | 24.7 | 16.6 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 50.0 | 40.4 | 58.9 |
| Obesity among adults (BMI ≥30) | 18.9 | 10.0 | 27.1 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 8.7 | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 37.8 | 41.5 | 34.1 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | No |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

 $^{^{\}ast}$ Estimates based on a combination of country life tables, cuase of death models, regional cause of death partterns, and WHO and UNAIDS program estimates

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | | |
|---|------------|--------------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CVD RISK ASSESSMENT | | | | |
| BMI | Yes | Not s _t | pecified | |
| Blood pressure | Yes | Not specified | | |
| Blood glucose | No | Not applicable | | |
| Blood lipids | Yes | Not s _t | pecified | |
| Individual risk management with a validated CV risk score | Yes | Not s _t | pecified | |
| DM AND CVD MANAGEMEN | IT | | | |
| Blood pressure monitoring | Yes | Not s _t | pecified | |
| Blood glucose monitoring | Yes | Not s _t | pecified | |
| Blood lipids monitoring | No | Not ap | plicable | |
| HbA1C | No | Not ap | plicable | |
| Diabetic foot examination | Yes | Not s _t | pecified | |
| Electrocardiogram | No | Not ap | plicable | |

| | Free? | | | |
|-------------------------------------|---------------------------------------|-------------|-----------|--|
| | Available? All Limi patients resou | | | |
| CERVICAL CANCER | | | | |
| Cervical cytology or PAP | Not specified | | | |
| HPV DNA testing | Not specified | | | |
| Visual inspection techniques (VIA) | No | t specified | | |
| VIA & cryotherapy in a single visit | Not specified | | | |
| BREAST CANCER | | | | |
| Clinical examination | No Not applicable | | | |
| Mammography | No | Not ap | plicable | |
| COLORECTAL CANCER | | | | |
| Fecal occult blood test | No | Not ap | pplicable | |
| Digital exam | No | Not ap | plicable | |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; CV: Cardiovascular.

SPECIALIZED CARE

| | | Free? | | |
|--------------------------------|------------|--------------------------------|--|--|
| | Available? | All Limited patients resources | | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | Not free | | |
| Diagnostic mammography | Yes | Not free | | |
| Chemotherapy | Yes | Not free | | |
| Radiotherapy | Yes | Not free | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | Not specified | | |
| Angioplasty | Yes | Not specified | | |

| | Available? | Free? All Limited patients resource | |
|--|------------|--------------------------------------|-----------|
| DIABETES MANAGEMENT | | padents | resources |
| Eye exams | Yes | Not specified | |
| Photocoagulation for retinopahty | Yes | Not specified | |
| Dialysis | Yes | | ✓ |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | | |
|--------------------|------------|--------------------------------|--|--|
| | Available: | All patients Limited resources | | |
| Insulin | Yes | Not free | | |
| Aspirin | Yes | Not free | | |
| Metformin | Yes | Not free | | |
| Glibenclamide | Yes | Not free | | |
| Thiazide diuretics | Yes | Not free | | |
| ACE inhibitors | Yes | Not free | | |

| | Available? | All patients | Free? Limited resources |
|------------------------------|------------|--------------|-------------------------|
| Calcium channels blockers | Yes | | Not free |
| Beta blockers | Yes | | Not free |
| Statins | Yes | | Not free |
| Tamoxifen | Yes | | Not free |
| Oral morphine | Yes | | Not free |

Sources:

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Proportional mortality: WHO. NCD Country Profiles, 2011.
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Absalón Pacheco Mercado, NCD National Program Coordinator, Ministry of Health and Sports, Bolivia.



NCDs IN BRAZIL

Sociodemographic indicators



Total population (thousands): 196,655.0

Average annual deaths (thousands): 1,261.1

Life expectancy at birth (years):

Total: 73.7 Male: 70.3 Female: 77.1

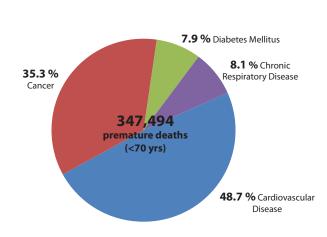
Adult literacy rate (%): 90.0

Gross National Income US\$ per capita: 8,070.0

% of population covered by any type health insurance: 100

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<**70 yrs**) account for **27.6** % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 16.7 | 20.4 | 13.7 |
| Adolescent tobacco smokers | 6.3 | 6.4 | 6.3 |
| Fruit and vegetable intake in adults ^a | 18.8 | 16.0 | 21.3 |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | 19.0 | 28.7 | 10.6 |
| Low physical activity in adults ^b | 12.1 | 14.7 | 9.9 |
| Low physical activity in adolescents ^c | 56.9 | 43.8 | 68.7 |
| Overweight among adults (BMI 25-29.9) | 42.5 | 48.6 | 36.5 |
| Obesity among adults (BMI ≥30) | 16.9 | 16.7 | 18.1 |
| Overweight among adolescents (BMI>+1SD) | 16.0 | | |
| Obesity among adolescents (BMI>+2SD) | 7.2 | | |
| Children <5 overweight | 7.3 | | |
| Adults with diabetes mellitus | 5.7 | 5.4 | 5.9 |
| Adults with raised BP and/or taking medication | 23.4 | 21.6 | 24.8 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days;

Country capacity

POLICIES & ACTION PLANS

| Is there an operational multisectoral mechanism to coordinate the NCD policies? | es |
|---|-----|
| | |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | S |
| Budget? Not specifi | ied |
| Measurable outcomes? Ye | :S |
| Monitoring and evaluation component? Yes | :S |
| Communications component? Ye | :S |
| Are there plans for specific diseases? | :S |

| Is there a budget? | Yes |
|---|--------------|
| Is there dedicated staff? | Yes |
| Does the information system include specific da | ta on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | ot specified |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | ? Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | | |
|---|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CVD RISK ASSESSMENT | | | | |
| BMI | Yes | Ø | | |
| Blood pressure | Yes | \bigcirc | | |
| Blood glucose | Yes | Ø | | |
| Blood lipids | Yes | \bigcirc | | |
| Individual risk management with a validated CV risk score | Yes | | | |
| DM AND CVD MANAGEMEN | IT | | | |
| Blood pressure monitoring | Yes | \bigcirc | | |
| Blood glucose monitoring | Yes | ⊘ | | |
| Blood lipids monitoring | Yes | \bigcirc | | |
| HbA1C | Yes | | | |
| Diabetic foot examination | Yes | Ø | | |
| Electrocardiogram | Yes | Ø | | |

| | | Free? | |
|-------------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \checkmark | |
| HPV DNA testing | Yes | \bigcirc | |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | Yes | Ø | |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | \bigcirc | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | Ø | |

Cardiovascular.

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | Ø | |
| Diagnostic mammography | Yes | \checkmark | |
| Chemotherapy | Yes | | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | | |
| Angioplasty | Yes | \checkmark | |

| | Available? | Free? | ee? |
|--|------------|--------------------|-------------------|
| | Available: | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \bigcirc | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | \checkmark | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | Not s _į | pecified |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | | |
|--------------------|------------|---------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Insulin | Yes | \checkmark | | |
| Aspirin | Yes | | ✓ | |
| Metformin | Yes | | | |
| Glibenclamide | Yes | Not specified | | |
| Thiazide diuretics | Yes | Ø | | |
| ACE inhibitors | Yes | \bigcirc | | |

| | 011-1-1-2 | Free? | |
|---------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| Calcium channels blockers | Yes | | Ø |
| Beta blockers | Yes | \checkmark | |
| Statins | Yes | | |
| Tamoxifen | Yes | \bigcirc | |
| Oral morphine | Yes | Ø | |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011. Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Deborah Carvalho Malta, NCDs Coordinator, Ministry of Health, Brazil.



NCDs IN CHILE

Sociodemographic indicators



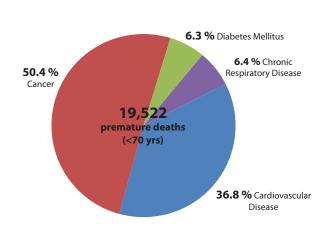
- Total population (thousands): 17,269.5
- Average annual deaths (thousands): 98.2
- Life expectancy at birth (years):

Total: **79.2** Male: **76.1** Female: **82.2**

- Adult literacy rate (%): 98.6
- Gross National Income US\$ per capita: 9,470.0
- % of population covered by any type health insurance: 89.0

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 19.9 % of all deaths

RISK FACTORS

| Prevalence (%) of ^a : | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 42.9 | 46.8 | 39.2 |
| Adolescent tobacco smokers | 35.6 | 30.9 | 38.6 |
| Fruit and vegetable intake in adults ^b | 15.8 | 13.6 | 17.9 |
| Fruit and vegetable intake in adolescents ^b | 23.2 | 23.1 | 23.2 |
| Binge drinking among adults | 30.8 | 45 | 17 |
| Low physical activity in adults ^c | 75.4 | 79.1 | 71.8 |
| Low physical activity in adolescents ^d | 79.9 | 72.6 | 87.4 |
| Overweight among adults (BMI 25-29.9) | 42.8 | 51.1 | 34.7 |
| Obesity among adults (BMI ≥30) | 28.7 | 21.8 | 35.5 |
| Overweight among adolescents (BMI>+1SD) | 26.3 | 31.7 | 21.0 |
| Obesity among adolescents (BMI>+2SD) | 4.2 | 4.9 | 3.4 |
| Children <5 overweight | 9.5 | | |
| Adults with diabetes mellitus | 8.9 | 7.7 | 10.1 |
| Adults with raised BP and/or taking medication | 26.1 | 29.5 | 22.8 |

Notes: a: adults aged 25-64; b: % who eat \leq 5 servings of fruit and vegetables per day; c: physically active for <600 met minutes; d: physically active less than 60 min per day in 5-7 of the last 7 days;

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |
| | |

| Is there a budget? Is there dedicated staff? Pes Does the information system include specific data on? Specific cause of mortality Hospital based morbidity Yes Risk factors surveys Are there disease specific registries? Yes Is there a unique personal identifier? Yes Use of data for policy making and planning? Yes Established mechanisms for data dissemination? Yes | | |
|--|---|-----|
| Does the information system include specific data on? Specific cause of mortality Hospital based morbidity Risk factors surveys Are there disease specific registries? Yes Is there a unique personal identifier? Yes Use of data for policy making and planning? Yes | Is there a budget? | Yes |
| Specific cause of mortality Hospital based morbidity Risk factors surveys Are there disease specific registries? Is there a unique personal identifier? Yes Use of data for policy making and planning? Yes | Is there dedicated staff? | Yes |
| Hospital based morbidity Risk factors surveys Are there disease specific registries? Is there a unique personal identifier? Yes Use of data for policy making and planning? Yes | Does the information system include specific data | on? |
| Risk factors surveys Are there disease specific registries? Is there a unique personal identifier? Yes Use of data for policy making and planning? Yes | Specific cause of mortality | Yes |
| Are there disease specific registries? Is there a unique personal identifier? Yes Use of data for policy making and planning? Yes | Hospital based morbidity | Yes |
| Is there a unique personal identifier? Use of data for policy making and planning? Yes | Risk factors surveys | Yes |
| Use of data for policy making and planning? Yes | Are there disease specific registries? | Yes |
| | Is there a unique personal identifier? | Yes |
| Established mechanisms for data dissemination? Yes | Use of data for policy making and planning? | Yes |
| | Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|--|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | ✓ | |
| Blood glucose | Yes | Ø | |
| Blood lipids | Yes | \bigcirc | |
| Individual risk management with a validated CV risk score ^a | Yes | ⊘ | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | Ø | |
| Blood lipids monitoring | Yes | ⊘ | |
| HbA1C | Yes | ⊘ | |
| Diabetic foot examination | Yes | ⊘ | |
| Electrocardiogram | Yes | ⊘ | |

| | Available? | Fr | ee? |
|---------------------------------------|------------|----------------|-----------|
| | | patients | resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \checkmark | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | No | Not applicable | |
| VIA & cryotherapy in a single visit | No | Not applicable | |
| BREAST CANCER | | | |
| Clinical examination | Yes | ⊘ | |
| Mammography ^b | Yes | ⊘ | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | No | Not applicable | |
| Digital exam | No | Not ap | plicable |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; CV: Cardiovascular; a: as part of the preventive medicine examination; b: all women 50-54 years of age.

SPECIALIZED CARE

| | Available? | Free? | | |
|--------------------------------|------------|--------------------------------|--|--|
| | | All Limited patients resources | | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | \bigcirc | | |
| Diagnostic mammography | Yes | ✓ | | |
| Chemotherapy | Yes | ⊘ | | |
| Radiotherapy | Yes | ⊘ | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | Not specified | | |
| Angioplasty | Yes | Not specified | | |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | · | |
| Eye exams | Yes | \bigcirc | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | \bigcirc | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | ⊘ | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available. | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | lacksquare | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | Ø | |

| | A! - - -2 | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| Calcium channels blockers | Yes | Ø | |
| Beta blockers | Yes | \bigcirc | |
| Statins | Yes | ⊘ | |
| Tamoxifen ^a | Yes | $ \bigcirc $ | |
| Oral morphine ^a | Yes | | |

Note: Patients under the GES plan (Guaranteed Health Plan).

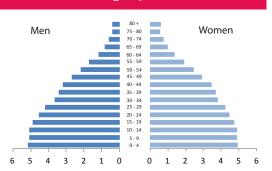
Sources

- Sociodemographic indicators and adolescents risk factors: Pan American Health Organization. Non communicable disease project, health inforamtion and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Adult risk factors and hypertension and diabetes prevalence: NCDs surveillance unit, Department of epidemiology, Ministry of Health of Chile, 2012.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by María Cristina Escobar Fritzsche, NCDs Department Chief, Ministry of Health, Chile.



NCDs IN COLOMBIA

Sociodemographic indicators



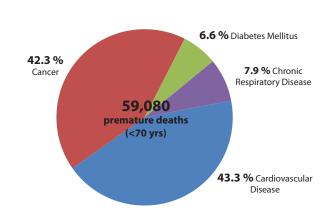
- Total population (thousands): 46,927.1
- Average annual deaths (thousands): 260,6
- Life expectancy at birth (years):

Total: **73.8** Male: **70.2** Female: **77.5**

- Adult literacy rate (%): 93.2
- Gross National Income US\$ per capita: 4,990.0
- % of population covered by any type health insurance: **84.9**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 22.7 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 12.8 | 19.5 | 7.4 |
| Adolescent tobacco smokers | 20.1 | 20.2 | 20.1 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 15.5 | 13.2 | 17.4 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | 79 | | |
| Low physical activity in adolescents ^c | 84.9 | 81.9 | 87.2 |
| Overweight among adults (BMI 25-29.9) | 32.3 | | |
| Obesity among adults (BMI ≥30) | 13.7 | | |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 4.2 | | |
| Adults with diabetes mellitus | 2.6 | 3.2 | 2.1 |
| Adults with raised BP and/or taking medication | 22.8 | 27.8 | 19.1 |

Notes: a: % who eat \le 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days;

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | No |
| Monitoring and evaluation component? | No |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | | |
| Blood glucose | Yes | \bigcirc | |
| Blood lipids | Yes | | |
| Individual risk management with a validated CV risk score | No | Not applicable | |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | Yes | \bigcirc | |
| HbA1C | No | Not ap | plicable |
| Diabetic foot examination | No | Not ap | plicable |
| Electrocardiogram | Yes | Not s _t | pecified |

| | | Free? | |
|-------------------------------------|------------|---------------|--|
| | Available? | All Limite | |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | ✓ | |
| HPV DNA testing | Yes | \checkmark | |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | Yes | Not specified | |
| BREAST CANCER | | | |
| Clinical examination | Yes | ⊘ | |
| Mammography | Yes | ✓ | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | Not specified | |
| Digital exam | Yes | Not specified | |

Cardiovascular.

SPECIALIZED CARE

| | Available? | Free? | |
|--------------------------------|------------|--------------------|-------------------|
| | | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | |
| Diagnostic mammography | Yes | | |
| Chemotherapy | Yes | | |
| Radiotherapy | Yes | \checkmark | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | Not s _t | pecified |
| Angioplasty | Yes | Not s _t | pecified |

| | Available? | Free? | |
|--|------------|--------------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | Not s _į | pecified |
| Dialysis | Yes | Not s _i | pecified |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | Not s _į | pecified |

NON COMMUNICABLE DISEASES MEDICINES

| | A! - - -2 | Free? |
|--------------------|------------|--------------------------------|
| | Available? | All patients Limited resources |
| Insulin | Yes | Not specified |
| Aspirin | Yes | Not specified |
| Metformin | Yes | Not specified |
| Glibenclamide | Yes | Not specified |
| Thiazide diuretics | Yes | Not specified |
| ACE inhibitors | Yes | Not specified |

| | Available? | Free? | | |
|------------------------------|------------|--------------------------------|--|--|
| | Available: | All patients Limited resources | | |
| Calcium channels blockers | Yes | Not specified | | |
| Beta blockers | Yes | Not specified | | |
| Statins | Yes | Not specified | | |
| Tamoxifen | Yes | Not specified | | |
| Oral morphine | Yes | Not specified | | |

Sources

- » Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Fernando Ramírez Campos, NCDs Subdirector, Ministry of Health and Social Protection, Colombia.



NCDs IN COSTA RICA

Sociodemographic indicators



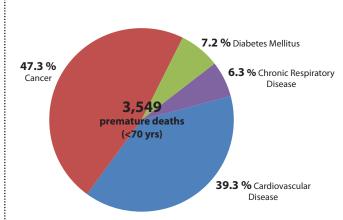
- Total population (thousands): 4,726.6
- Average annual deaths (thousands): 20.4
- Life expectancy at birth (years):

Total: 79.4 Male: 77.0 Female: 81.9

- Adult literacy rate (%): 96.1
- Gross National Income US\$ per capita: 6,260.0
 - % of population covered by any type health insurance: 87.6

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 17.4 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 14.2 | 21.7 | 6.6 |
| Adolescent tobacco smokers | 9.5 | 10.4 | 8.4 |
| Fruit and vegetable intake in adults ^a | 22.3 | 24.2 | 20.4 |
| Fruit and vegetable intake in adolescents ^a | 19.5 | 21.4 | 17.6 |
| Binge drinking among adults | 6.2 | 9.5 | 3.2 |
| Low physical activity in adults ^b | 50.9 | 38.6 | 63.4 |
| Low physical activity in adolescents ^c | 72.6 | 64.1 | 81.0 |
| Overweight among adults (BMI 25-29.9) | 36.1 | 37.2 | 34.8 |
| Obesity among adults (BMI ≥30) | 26.0 | 21.2 | 31.0 |
| Overweight among adolescents (BMI>+1SD) | 27.8 | 28.7 | 27.3 |
| Obesity among adolescents (BMI>+2SD) | 8.9 | 10.2 | 7.6 |
| Children <5 overweight | 9.6 | | |
| Adults with diabetes mellitus | 7.9 | 8.3 | 7.6 |
| Adults with raised BP and/or taking medication | 25.6 | 26.1 | 25.0 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | No |
| Budget? | N/A |
| Measurable outcomes? | N/A |
| Monitoring and evaluation component? | N/A |
| Communications component? | N/A |
| Are there plans for specific diseases? | Yes |
| Notes: N/A: Not applicable. | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | | |
|---|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CVD RISK ASSESSMENT | | | | |
| BMI | Yes | \bigcirc | | |
| Blood pressure | Yes | | | |
| Blood glucose | Yes | | | |
| Blood lipids | Yes | \bigcirc | | |
| Individual risk management with a validated CV risk score | Yes | ⊘ | | |
| DM AND CVD MANAGEMEN | IT | | | |
| Blood pressure monitoring | Yes | \checkmark | | |
| Blood glucose monitoring | Yes | \bigcirc | | |
| Blood lipids monitoring | Yes | \bigcirc | | |
| HbA1C | Yes | ⊘ | | |
| Diabetic foot examination | Yes | | | |
| Electrocardiogram | Yes | ⊘ | | |

| | | Free? | | |
|-------------------------------------|------------|--------------|------------------|--|
| | Available? | All patients | Limited resource | |
| CERVICAL CANCER | | | | |
| Cervical cytology or PAP | Yes | \checkmark | | |
| HPV DNA testing | No | Not ap | plicable | |
| Visual inspection techniques (VIA) | Yes | Ø | | |
| VIA & cryotherapy in a single visit | Yes | \checkmark | | |
| BREAST CANCER | | | | |
| Clinical examination | Yes | Ø | | |
| Mammography | Yes | \bigcirc | | |
| COLORECTAL CANCER | | | | |
| Fecal occult blood test | Yes | | | |
| Digital exam | Yes | Ø | | |

SPECIALIZED CARE

| | Available? | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|
| | | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | | | |
| Diagnostic mammography | Yes | \bigcirc | | |
| Chemotherapy | Yes | \bigcirc | | |
| Radiotherapy | Yes | \bigcirc | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | | | |
| Angioplasty | Yes | \checkmark | | |

| | Available? | Free? All Limited patients resource | |
|--|------------|--------------------------------------|--|
| DIABETES MANAGEMENT | | • | |
| Eye exams | Yes | Not specified | |
| Photocoagulation for retinopahty | No | Not applicable | |
| Dialysis | Yes | Not specified | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | ⊘ | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | | |
|--------------------|------------|--------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Insulin | Yes | \bigcirc | | |
| Aspirin | Yes | \bigcirc | | |
| Metformin | Yes | \bigcirc | | |
| Glibenclamide | Yes | | | |
| Thiazide diuretics | Yes | \checkmark | | |
| ACE inhibitors | Yes | ✓ | | |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | | |
| Statins | Yes | ⊘ | |
| Tamoxifen | Yes | ⊘ | |
| Oral morphine | Yes | \bigcirc | |

Sources

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Margarita Claramunt Garro, NCDs Focal Point, Ministry of Health, Costa Rica.



NCDs IN CUBA

Sociodemographic indicators



Total population (thousands): 11,253.7

Average annual deaths (thousands): 83.9

Life expectancy at birth (years):

Total: **79.2** Male: **77.2** Female: **81.2**

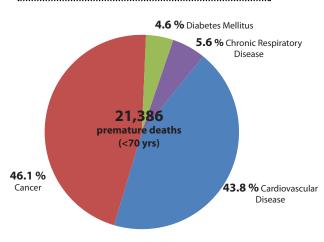
Adult literacy rate (%): 99.8

Gross National Income US\$ per capita: 5,550.0

% of population covered by any type health insurance: **100.0**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 25.5 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females | |
|---|-------|-------|---------|--|
| Current adult tobacco smokers | | 44.8 | 29.6 | |
| Adolescent tobacco smokers | 14.6 | 15.7 | 13.6 | |
| Fruit and vegetable intake in adults ^a | | | | |
| Fruit and vegetable intake in adolescents ^a | | | | |
| Binge drinking among adults | | | | |
| Low physical activity in adults ^b | | | | |
| Low physical activity in adolescents ^c | | | | |
| Overweight among adults (BMI 25-29.9) | 42.5 | 37.7 | 47.0 | |
| Obesity among adults (BMI ≥30) | 20.5 | 13.3 | 27.5 | |
| Overweight among adolescents (BMI>+1SD) | | | | |
| Obesity among adolescents (BMI>+2SD) | | | | |
| Children <5 overweight | | | | |
| Adults with diabetes mellitus | | | | |
| Adults with raised BP and/or taking medication | 28.8 | 26.7 | 31.0 | |
| Netering () who are all consists of finite and consequences and on the physical linearity for a consequence | | | | |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Yes |
|-----|
| Yes |
| No |
| N/A |
| N/A |
| N/A |
| N/A |
| Yes |
| |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | Ø | |
| Blood pressure | Yes | \checkmark | |
| Blood glucose | Yes | Ø | |
| Blood lipids | Yes | | |
| Individual risk management with a validated CV risk score | Yes | | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | | |
| Blood glucose monitoring | Yes | \checkmark | |
| Blood lipids monitoring | Yes | | |
| HbA1C | Yes | | |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | ⊘ | |

| | | Fr | ee? |
|---------------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \checkmark | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | Yes | ⊘ | |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | ✓ | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | ⊘ | |

Cardiovascular.

SPECIALIZED CARE

| | Available? | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | \bigcirc | |
| Diagnostic mammography | Yes | \bigcirc | |
| Chemotherapy | Yes | | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | \bigcirc | |
| Angioplasty | Yes | Ø | |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | \bigcirc | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | ⊘ | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \bigcirc | |
| Aspirin | Yes | \bigcirc | |
| Metformin | Yes | | |
| Glibenclamide | Yes | \bigcirc | |
| Thiazide diuretics | Yes | | |
| ACE inhibitors | Yes | \bigcirc | |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | \checkmark | |
| Beta blockers | Yes | \checkmark | |
| Statins | Yes | \bigcirc | |
| Tamoxifen | Yes | \bigcirc | |
| Oral morphine | Yes | \checkmark | |

Sources:

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Orlando Landrove Rodríguez, National NCD Program Coordinator, Ministry of Health, Cuba.



NCDs IN DOMINICA

Sociodemographic indicators



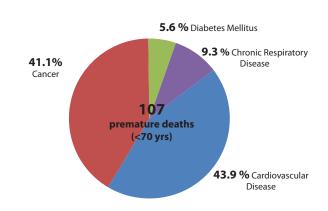
- Total population (thousands): 73.0
- Average annual deaths (thousands): 0.6
- Life expectancy at birth (years):

Total: **76.0** Male: **73.0** Female: **79.1**

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: 4,900.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 17.8 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 10.2 | 16.6 | 3.2 |
| Adolescent tobacco smokers | 17.2 | 19.3 | 13.5 |
| Fruit and vegetable intake in adults ^a | 8.7 | 8.9 | 7.4 |
| Fruit and vegetable intake in adolescents ^a | 26.4 | 29.2 | 23.4 |
| Binge drinking among adults | | 31.4 | 8.5 |
| Low physical activity in adults ^b | 24.0 | 14.5 | 34.3 |
| Low physical activity in adolescents ^c | 76.3 | 75.2 | 77.4 |
| Overweight among adults (BMI 25-29.9) | 24.9 | 20.9 | 29.2 |
| Obesity among adults (BMI ≥30) | 20.2 | 8.6 | 32.7 |
| Overweight among adolescents (BMI>+1SD) | 24.8 | 24.0 | 25.9 |
| Obesity among adolescents (BMI>+2SD) | 9.1 | 8.8 | 9.6 |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | 17.7 | 22.0 | 12.0 |
| Adults with raised BP and/or taking medication | 32.1 | 32.0 | 32.1 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|------------------|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes ^a |
| Budget? | No |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | NE |
| Communications component? | Yes |
| Are there plans for specific diseases? | No |
| Notes: a: Draft plan; NE: Not specified. | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|----------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \checkmark | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | | |
| Blood lipids | Yes | | \bigcirc |
| Individual risk management with a validated CV risk score | No | Not applicable | |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | | \bigcirc |
| Blood lipids monitoring | Yes | | \bigcirc |
| HbA1C | Yes | | |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | | Ø |

| | | Fr | ee? |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | Ø | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | No | Not ap | plicable |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | | \bigcirc |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | | |

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | \bigcirc |
| Diagnostic mammography | Yes | | ⊘ |
| Chemotherapy | Yes | | \bigcirc |
| Radiotherapy | No | Not ap | plicable |
| CVD MANAGEMENT | | | |
| Cardiac bypass | No | Not ap | plicable |
| Angioplasty | No | Not ap | plicable |

| | | Free? | |
|--|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | \checkmark |
| Photocoagulation for retinopahty | Yes | | ✓ |
| Dialysis | Yes | | \bigcirc |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | \bigcirc | |
| Metformin | Yes | ✓ | |
| Glibenclamide | Yes | \checkmark | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | Ø | |

| | Available? | | Free? |
|---------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | Ø | |
| Beta blockers | Yes | Ø | |
| Statins | Yes | No | ot specified |
| Tamoxifen | Yes | ✓ | |
| Oral morphine | Yes | | |

Sources:

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Anthelia A. James, NCDs Focal Point, Ministy of Health, Dominica.



NCDs IN DOMINICAN REPUBLIC

Sociodemographic indicators



Total population (thousands): 10,056.2

Average annual deaths (thousands): 60.1

Life expectancy at birth (years):

Total: **73.5** Male: **70.9** Female: **76.3**

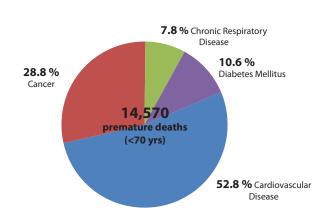
Adult literacy rate (%): 88.2

Gross National Income US\$ per capita: 4,550.0

% of population covered by any type health insurance: 21.0

Burden of disease

PREMATURE DEATHS (2004)



Premature deaths from NCDs (<70 yrs) account for 25.2 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | 14.9 | 11.0 |
| Adolescent tobacco smokers | 14.9 | 18.4 | 11.9 |
| Fruit and vegetable intake in adults ^a | 24.8 | 29.6 | 19.8 |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | 9.9 | 15.2 | 4.4 |
| Low physical activity in adults ^b | 35.7 | 31.5 | 40.0 |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 54.3 | 48.8 | 38.0 |
| Obesity among adults (BMI ≥30) | 16.4 | 12.7 | 18.3 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 8.3 | | |
| Adults with diabetes mellitus | 5.5 | 2.2 | 2.8 |
| Adults with raised BP and/or taking medication | 16.8 | 4.9 | 9.8 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | No |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | Ø | |
| Blood pressure | Yes | \checkmark | |
| Blood glucose | Yes | | \checkmark |
| Blood lipids | Yes | | \bigcirc |
| Individual risk management with a validated CV risk score | Yes | Ø | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | | |
| Blood glucose monitoring | Yes | | |
| Blood lipids monitoring | Yes | | \checkmark |
| HbA1C | No | Not ap | plicable |
| Diabetic foot examination | Yes | | |
| Electrocardiogram | No | Not ap | plicable |

| | | Fre | e? |
|-------------------------------------|------------|--------------|--------------|
| | Available? | All patients | Limited |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \checkmark | |
| HPV DNA testing | No | Not app | olicable |
| Visual inspection techniques (VIA) | No | Not app | olicable |
| VIA & cryotherapy in a single visit | No | Not app | olicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | \bigcirc | |
| Mammography | Yes | Not sp | ecified |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | \checkmark |
| Digital exam | Yes | Ø | |

SPECIALIZED CARE

| | Available? | Free? | |
|--------------------------------|------------|--------------------|-------------------|
| | | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | Not s _i | pecified |
| Diagnostic mammography | Yes | Not s _i | pecified |
| Chemotherapy | Yes | Not s _i | pecified |
| Radiotherapy | Yes | Not s _i | pecified |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | Not s _i | pecified |
| Angioplasty | Yes | Not s _i | pecified |

| | Available? | Fr All patients | ee? Limited resources |
|--|------------|-----------------------|-----------------------|
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | Not s _i | pecified |
| Dialysis | Yes | | ⊘ |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | ⊘ | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available. | All patients | Limited resources |
| Insulin | Yes | \bigcirc | |
| Aspirin | Yes | \bigcirc | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | Ø | |

| | Available? | Free? | | |
|------------------------------|------------|----------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Calcium channels blockers | Yes | Ø | | |
| Beta blockers | Yes | \checkmark | | |
| Statins | Yes | | | |
| Tamoxifen | Yes | Not specified | | |
| Oral morphine | No | Not applicable | | |

Sources:

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Daniel Mola de Oleo, NCDs National Program, Ministry of Health, Dominican Republic.



NCDs IN ECUADOR

Sociodemographic indicators



Total population (thousands): 14,757.3

Average annual deaths (thousands): 74.5

Life expectancy at birth (years):

Total: **75.7** Male: **72.8** Female: **78.7**

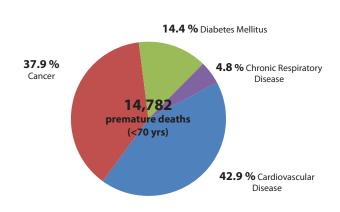
Adult literacy rate (%): 84.2

Gross National Income US\$ per capita: 3.970,0

% of population covered by any type health insurance: 23.0

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 19.8 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | | |
| Adolescent tobacco smokers | 28.6 | 31.2 | 26.1 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 24.3 | 23.3 | 25.3 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 85.2 | 81.1 | 89.2 |
| Overweight among adults (BMI 25-29.9) | 56.0 | 51.8 | 60.2 |
| Obesity among adults (BMI ≥30) | 22.0 | 15.7 | 28.2 |
| Overweight among adolescents (BMI>+1SD) | 28.6 | 31.2 | 26.0 |
| Obesity among adolescents (BMI>+2SD) | 7.3 | 8.9 | 6.1 |
| Children <5 overweight | 5.1 | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 38.6 | 42.7 | 34.6 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | ⊘ | |
| Blood pressure | Yes | | |
| Blood glucose | Yes | ✓ | |
| Blood lipids | Yes | | |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | Yes | \checkmark | |
| HbA1C | Yes | | |
| Diabetic foot examination | Yes | ⊘ | |
| Electrocardiogram | Yes | ⊘ | |

| | | Free? | |
|---------------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | \bigcirc | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | \checkmark | |
| Digital exam | Yes | | |

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | \checkmark | |
| Diagnostic mammography | Yes | \bigcirc | |
| Chemotherapy | Yes | | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | \checkmark | |
| Angioplasty | Yes | \checkmark | |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | ⊘ | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | | |
|--------------------|------------|----------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Insulin | Yes | \bigcirc | | |
| Aspirin | No | Not applicable | | |
| Metformin | Yes | \checkmark | | |
| Glibenclamide | Yes | lacksquare | | |
| Thiazide diuretics | Yes | | | |
| ACE inhibitors | Yes | Ø | | |

| | Available? | Free? | | |
|------------------------------|------------|--------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Calcium channels blockers | Yes | | | |
| Beta blockers | Yes | \bigcirc | | |
| Statins | Yes | | | |
| Tamoxifen | Yes | ⊘ | | |
| Oral morphine | Yes | \checkmark | | |

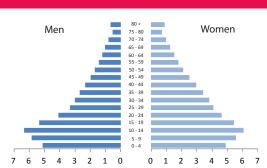
Sources:

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Gabriela Aguinaga, Coordinator of the National Direction for Normatization, Ministry of Public Health, Ecuador.



NCDs IN EL SALVADOR

Sociodemographic indicators



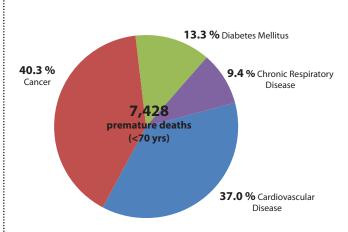
- Total population (thousands): **6,227.5**
- Average annual deaths (thousands): 41.0
- Life expectancy at birth (years):

Total: 72.3 Male: 67.4 Female: 76.9

- Adult literacy rate (%): 84.1
- Gross National Income US\$ per capita: 3,370.0
- % of population covered by any type health insurance: 20.5

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 18.1 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 13.9 | 24.3 | 5.5 |
| Adolescent tobacco smokers | 19.0 | 24.4 | 15.4 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | 4.7 | 8.8 | 1.5 |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 38.3 | 44.3 | 34.7 |
| Obesity among adults (BMI ≥30) | 23.7 | 19.9 | 27.1 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 5.8 | | |
| Adults with diabetes mellitus | 7.6 | 8.7 | 6.8 |
| Adults with raised BP and/or taking medication | 20.1 | 21.4 | 19.0 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | No |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | No |
| Note: N/A: Not applicable | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | No |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | \checkmark | |
| Blood glucose | Yes | | \bigcirc |
| Blood lipids | Yes | | |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | | |
| Blood glucose monitoring | Yes | | \checkmark |
| Blood lipids monitoring | Yes | \bigcirc | |
| HbA1C | Yes | | |
| Diabetic foot examination | Yes | | Ø |
| Electrocardiogram | Yes | | \checkmark |

| | | Fr | ee? |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | Ø | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | | Ø |
| VIA & cryotherapy in a single visit | Yes | | \checkmark |
| BREAST CANCER | | | |
| Clinical examination | Yes | \checkmark | |
| Mammography | Yes | | Ø |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | \checkmark |
| Digital exam | Yes | | Ø |

SPECIALIZED CARE

| | | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | | \checkmark | |
| Diagnostic mammography | Yes | | ✓ | |
| Chemotherapy | Yes | | \bigcirc | |
| Radiotherapy | Yes | | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | | ✓ | |
| Angioplasty | Yes | | \bigcirc | |

| | | Fr | ee? |
|--|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | \checkmark |
| Photocoagulation for retinopahty | Yes | | Ø |
| Dialysis | Yes | | \bigcirc |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | | \bigcirc |
| Aspirin | Yes | | \bigcirc |
| Metformin | Yes | | ✓ |
| Glibenclamide | Yes | | |
| Thiazide diuretics | Yes | | |
| ACE inhibitors | Yes | ✓ | |

| | Available? | Free? | |
|---------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | \checkmark |
| Beta blockers | Yes | | |
| Statins | Yes | | ⊘ |
| Tamoxifen | No | No | t applicable |
| Oral morphine | No | No | t applicable |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Raúl Armando Palomo Escobar, Integrated Management of Prevalent Diseases Program Manager, Ministry of Health, El Salvador.



NCDs IN GRENADA

Sociodemographic indicators



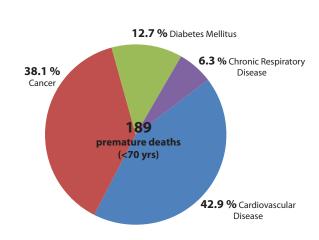
- Total population (thousands): 108.4
- Average annual deaths (thousands): 0.9
- Life expectancy at birth (years):

Total: 73.0 Male: 70.5 Female: 75.8

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: 5,580.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 21.0 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | | |
| Adolescent tobacco smokers | 4.7 | 7.0 | 3.0 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 33.4 | 34.4 | 32.6 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 84.8 | 81.9 | 86.9 |
| Overweight among adults (BMI 25-29.9) | | | |
| Obesity among adults (BMI ≥30) | | | |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | | | |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| No |
|-----|
| Yes |
| No |
| N/A |
| N/A |
| N/A |
| N/A |
| Yes |
| |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | \bigcirc | |
| Blood lipids | Yes | No | t free |
| Individual risk management with a validated CV risk score | Yes | ⊘ | |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | \checkmark | |
| Blood lipids monitoring | Yes | Not s _į | pecified |
| HbA1C | Yes | No | t free |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | No | t free |

| | | Free? | |
|-------------------------------------|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not applicable | |
| Visual inspection techniques (VIA) | No | Not ap | plicable |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | ⊘ | |
| Mammography | Yesa | Not ap | plicable |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | Not s _i | pecified |
| Digital exam | Yes | Not s _t | pecified |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; CV Cardiovascular. a: Available privately.

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|----------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | Not specified | |
| Diagnostic mammography | Yesa | Not applicable | |
| Chemotherapy | Yes | \bigcirc | |
| Radiotherapy | No | Not applicable | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | No | Not ap | olicable |
| Angioplasty | No | Not app | olicable |

Notes: a: Available privately.

| | Free? | |
|---------------------|---------------|-------------------|
| lable? pa | All tients | Limited resources |
| | | |
| 'es | ✓ | |
| 'es | ✓ | |
| es ^a | Not app | licable |
| | | |
| lo | Not app | licable |
| | | |

Notes: a: Available privately.

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------------------------|--|
| | Available: | All patients Limited resources | |
| Insulin | Yes | Not free ^a | |
| Aspirin | Yes | Not free ^a | |
| Metformin | Yes | Not free ^a | |
| Glibenclamide | Yes | Not free ^a | |
| Thiazide diuretics | Yes | Not free ^a | |
| ACE inhibitors | Yes | Not free ^a | |

Note: Available to all patients with a 5 EC dollar co-payment per monthly supply.

| | Available? | Free? All patients Limited resources |
|---------------------------|------------------|--------------------------------------|
| Calcium channels blockers | Yes | Not free ^a |
| Beta blockers | Yes | Not free ^a |
| Statins | Yes | ✓ |
| Tamoxifen | Yes ^b | Not applicable |
| Oral morphine | Yes | ⊘ |

Notes: b: Available privately.

- » Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health inforamtion and analysis prject and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: Regional Mortality Information System. Regional Health Observatory. PAHO/WHO, 2011.
- Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by George Mitchell, Senior Medical Officer, Ministr of Health, Grenada



NCDs IN GUATEMALA

Sociodemographic indicators



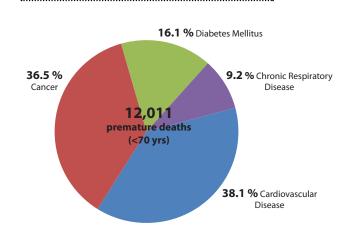
- Total population (thousands): 14,757.3
- Average annual deaths (thousands): 80.5
- Life expectancy at birth (years):

Total: 71.3 Male: 67.7 Female: 74.8

- Adult literacy rate (%): 74.5
- Gross National Income US\$ per capita: 2,650.0
- % of population covered by any type health insurance: 23.4

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 14.9 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 19.5 | 35.2 | 4.4 |
| Adolescent tobacco smokers | 16.6 | 19.7 | 13.3 |
| Fruit and vegetable intake in adults ^a | 19.0 | 20.4 | 18.1 |
| Fruit and vegetable intake in adolescents ^a | 26.7 | 26.6 | 26.7 |
| Binge drinking among adults | 6.9 | 13.1 | 1.2 |
| Low physical activity in adults ^b | 50.4 | 56.0 | 45.0 |
| Low physical activity in adolescents ^c | 75.9 | 71.4 | 80.8 |
| Overweight among adults (BMI 25-29.9) | 38.5 | 38.8 | 38.2 |
| Obesity among adults (BMI ≥30) | 21.3 | 16.0 | 25.8 |
| Overweight among adolescents (BMI>+1SD) | 27.1 | 26.8 | 27.3 |
| Obesity among adolescents (BMI>+2SD) | 7.5 | 9.4 | 5.4 |
| Children <5 overweight | 5.6 | | |
| Adults with diabetes mellitus | 8.2 | 8.8 | 7.7 |
| Adults with raised BP and/or taking medication | 13.6 | 12.7 | 14.4 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | No |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | No |
| Risk factors surveys | Yes |
| Are there disease specific registries? | No |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|----------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | Ø | |
| Blood pressure | Yes | | |
| Blood glucose | Yes | $ \checkmark $ | |
| Blood lipids | No | Not applicable | |
| Individual risk management with a validated CV risk score | Yes | Ø | |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | No | Not ap | plicable |
| HbA1C | No | Not ap | plicable |
| Diabetic foot examination | Yes | ⊘ | |
| Electrocardiogram | No | Not ap | plicable |

| | Available? | Free? | |
|-------------------------------------|------------|--------------|--------------------|
| | | | Limited esource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not appli | cable |
| Visual inspection techniques (VIA) | Yes | Ø | |
| VIA & cryotherapy in a single visit | Yes | \checkmark | |
| BREAST CANCER | | | |
| Clinical examination | Yes | \checkmark | |
| Mammography | No | Not appli | cable |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | No | Not appli | cable |
| Digital exam | No | Not appli | cable |

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | \bigcirc |
| Diagnostic mammography | Yes | | \bigcirc |
| Chemotherapy | Yes | | \bigcirc |
| Radiotherapy | Yes | | \bigcirc |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | | ✓ |
| Angioplasty | Yes | | \bigcirc |

| | | Free? | |
|--|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | | Ø |
| Dialysis | Yes | | \bigcirc |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|----------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \bigcirc | |
| Aspirin | No | Not applicable | |
| Metformin | Yes | | |
| Glibenclamide | Yes | | \bigcirc |
| Thiazide diuretics | Yes | | \bigcirc |
| ACE inhibitors | Yes | | Ø |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | No | No | t applicable |
| Beta blockers | Yes | | Ø |
| Statins | No | No | t applicable |
| Tamoxifen | No | No | t applicable |
| Oral morphine | No | No | t applicable |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health inforamtion and analysis prject and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Eduardo Alberto Palacios Cacacho, NCDs and Cancer National Program Coordinator, Ministry of Health and Social Assistance, Guatemala.



NCDs IN GUYANA

Sociodemographic indicators



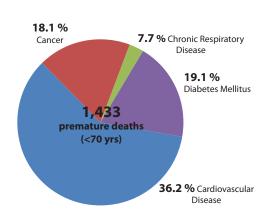
- Total population (thousands): **756.0**
- Average annual deaths (thousands): 4.4
- Life expectancy at birth (years):

Total: 70.0 Male: 66.9 Female: 73.1

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: 2,660.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2006)



Premature deaths from NCDs (<70 yrs) account for 28.6 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | | |
| Adolescent tobacco smokers | 12.0 | 17.4 | 6.8 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 31.7 | 34.3 | 29.4 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 78.7 | 76.2 | 80.9 |
| Overweight among adults (BMI 25-29.9) | 29.0 | 26.0 | 30.7 |
| Obesity among adults (BMI ≥30) | 22.4 | 14.3 | 26.9 |
| Overweight among adolescents (BMI>+1SD) | 15.3 | 14.6 | 15.9 |
| Obesity among adolescents (BMI>+2SD) | 4.1 | 4.6 | 3.6 |
| Children <5 overweight | 6.8 | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 40.5 | 42.6 | 38.1 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|------|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yesª |
| Budget? | Yes |
| Measurable outcomes? | NS |
| Monitoring and evaluation component? | NS |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |
| | |

Notes: N/A: Not applicable; NS: Not specified; a: Draft plan.

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | | |
|---|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CVD RISK ASSESSMENT | | | | |
| BMI | Yes | \checkmark | | |
| Blood pressure | Yes | | | |
| Blood glucose | Yes | \checkmark | | |
| Blood lipids | Yes | \checkmark | | |
| Individual risk management with a validated CV risk score | No | Not ap | pplicable | |
| DM AND CVD MANAGEMEN | IT | | | |
| Blood pressure monitoring | Yes | \bigcirc | | |
| Blood glucose monitoring | Yes | \checkmark | | |
| Blood lipids monitoring | Yes | \bigcirc | | |
| HbA1C | Yes | ⊘ | | |
| Diabetic foot examination | Yes | Ø | | |
| Electrocardiogram | Yes | Ø | | |

| | | Free? | |
|-------------------------------------|------------|--------------|----------|
| | Available? | All patients | Limited |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | Ø | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | Yes | \checkmark | |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | \bigcirc | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | | |

SPECIALIZED CARE

| | Available? | Free? | |
|--------------------------------|------------|--------------------|-------------------|
| | | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | |
| Diagnostic mammography | Yes | | |
| Chemotherapy | Yes | \bigcirc | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | Not s _t | pecified |
| Angioplasty | Yes | Not s _t | pecified |

| | | Free? | |
|--|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \bigcirc | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | | \bigcirc |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yesª | Not s _į | pecified |

Notes: a: Available in one region.

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | | |
| Aspirin | Yes | \checkmark | |
| Metformin | Yes | \checkmark | |
| Glibenclamide | Yes | | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | ✓ | |

| | Available? | | Free? |
|---------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | \bigcirc | |
| Statins | Yes | Ø | |
| Tamoxifen | Yes | Ø | |
| Oral morphine | No | No | t applicable |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by por Marcia Paltoo, Director, Chronic Disease Department, Ministry of Health, Guyana.



NCDs IN HONDURAS

Sociodemographic indicators



Total population (thousands): 7,754.7.1

Average annual deaths (thousands): 37.5

Life expectancy at birth (years):

Total: 73.3 Male: 71.0 Female: 75.6

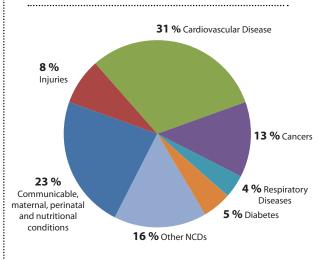
Adult literacy rate (%): 83.6

Gross National Income US\$ per capita: 1,800.0

% of population covered by any type health insurance: 11.6

Burden of disease

PROPORTIONAL MORTALITY (2008)*



NCDs are estimated to account for 69 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 16.4 | 27.2 | 3.4 |
| Adolescent tobacco smokers | 20.4 | 22.8 | 18.2 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | 9.9 | 17.3 | 1.7 |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 34.9 | 36.6 | 33.2 |
| Obesity among adults (BMI ≥30) | 19.3 | 15.5 | 24.5 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 5.8 | | |
| Adults with diabetes mellitus | 5.4 | 5.5 | 5.4 |
| Adults with raised BP and/or taking medication | 23.0 | 24.4 | 21.2 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

Note: N/A: Not applicable.

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | No |
| Budget? | N/A |
| Measurable outcomes? | N/A |
| Monitoring and evaluation component? | N/A |
| Communications component? | N/A |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | No |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | No |
| Established mechanisms for data dissemination? | No |

 $^{^{\}ast}$ Estimates based on a combination of country life tables, cuase of death models, regional cause of death partterns, and WHO and UNAIDS program estimates

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \checkmark | |
| Blood pressure | Yes | Ø | |
| Blood glucose | Yes | | |
| Blood lipids | Yes | \checkmark | |
| Individual risk management with a validated CV risk score | No | ot specified | |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | No | Not ap | plicable |
| HbA1C | Yes | \bigcirc | |
| Diabetic foot examination | No | Not ap | plicable |
| Electrocardiogram | No | Not ap | plicable |

| | | Free? | |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | Ø | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | No | Not ap | plicable |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | | \bigcirc |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | No | t specified | |
| Digital exam | No | t specified | |

SPECIALIZED CARE

| | | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | | \bigcirc | |
| Diagnostic mammography | Yes | | \bigcirc | |
| Chemotherapy | Yes | | | |
| Radiotherapy | Yes | | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | No | Not ap | plicable | |
| Angioplasty | No | Not ap | plicable | |

| | | Free? | |
|--|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | \checkmark |
| Photocoagulation for retinopahty | Yes | | Ø |
| Dialysis | Yes | | ✓ |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | | \bigcirc |
| Aspirin | Yes | | |
| Metformin | Yes | | \bigcirc |
| Glibenclamide | Yes | \checkmark | |
| Thiazide diuretics | Yes | | |
| ACE inhibitors | Yes | | Ø |

| | Available? | | Free? |
|---------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | \bigcirc |
| Beta blockers | Yes | | \bigcirc |
| Statins | Yes | | ⊘ |
| Tamoxifen | Yes | | ⊘ |
| Oral morphine | No | No | t applicable |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- Proportional mortality: WHO. NCD Country Profiles, 2011.
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Rosa María Duarte Flores, Cancer Control Program Manager and NCDs Focal Point, Secretary of Health, Honduras.



NCDs IN JAMAICA

Sociodemographic indicators



Total population (thousands): 2,751.3

Average annual deaths (thousands): 19.9

Life expectancy at birth (years):

Total: 73.2 Male: 70.7 Female: 75.8

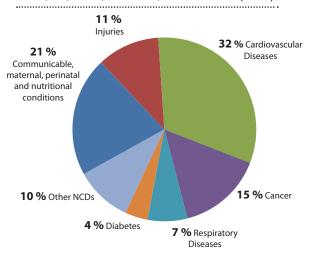
Adult literacy rate (%): 86.4

Gross National Income US\$ per capita: 4,590.0

% of population covered by any type health insurance: **18.9**

Burden of disease

PROPORTIONAL MORTALITY (2008)*



Se estima que las **ENT** representan un **68 %** de todas las muertes

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 14.5 | 22.1 | 7.2 |
| Adolescent tobacco smokers | 20.2 | 22.5 | 17.7 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 28.2 | 29.6 | 26.8 |
| Binge drinking among adults | | 15.0 | 3.0 |
| Low physical activity in adults ^b | 15.7 | 12.2 | 19.2 |
| Low physical activity in adolescents ^c | 21.2 | 17.1 | 25.3 |
| Overweight among adults (BMI 25-29.9) | 26.4 | 25.8 | 27.0 |
| Obesity among adults (BMI ≥30) | 25.3 | 12.4 | 37.7 |
| Overweight among adolescents (BMI>+1SD) | 21.7 | 18.1 | 25.2 |
| Obesity among adolescents (BMI>+2SD) | 6.0 | 5.3 | 6.7 |
| Children <5 overweight | 7.5 | | |
| Adults with diabetes mellitus | 12.2 | 9.8 | 14.6 |
| Adults with raised BP and/or taking medication | 35.3 | 33.8 | 36.9 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | No |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | No |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

^{*} Estimaciones basadas en tablas de mortalidad por país, modelos de causa de defunción, esquemas regionales de causas de defunción y estimaciones de programas de la OMS y ONUSIDA.

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \checkmark | |
| Blood pressure | Yes | ✓ | |
| Blood glucose | Yes | | |
| Blood lipids | Yes | | |
| Individual risk management with a validated CV risk score | No | Not applicable | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | Yes | \checkmark | |
| HbA1C | Yes | | |
| Diabetic foot examination | Yes | Not s _i | pecified |
| Electrocardiogram | No | Not ap | plicable |

| | | Fr | ee? |
|-------------------------------------|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \checkmark | |
| HPV DNA testing | Yes | Not s _t | pecified |
| Visual inspection techniques (VIA) | No | Not ap | plicable |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | ✓ | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | Ø | |

 $Notes: HPV: Human\ Papillomavirus;\ DM:\ Diabetes\ mellitus;\ CVD:\ Cardiovascular\ disease;\ CCardiovascular$

SPECIALIZED CARE

| | Available? | Free? | | |
|--------------------------------|------------|--------------------|-------------------|--|
| | | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | \checkmark | | |
| Diagnostic mammography | Yes | \bigcirc | | |
| Chemotherapy | Yes | \bigcirc | | |
| Radiotherapy | Yes | \bigcirc | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | Not s _t | pecified | |
| Angioplasty | Yes | Not s _t | pecified | |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | \bigcirc | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | \checkmark | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | \bigcirc | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | Ø | |

| | Available? | Free? | |
|---------------------------|------------|--------------|-------------------|
| | Availables | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | Ø | |
| Statins | Yes | | |
| Tamoxifen | Yes | ⊘ | |
| Oral morphine | Yes | ✓ | |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Proportional mortality: WHO. NCD Country Profiles, 2011.
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Tamu Davidson, Medical Epidemiologist Chronic Disease and Injuries Prevention, Ministry of Health, Jamaica.



NCDs IN MEXICO

Sociodemographic indicators



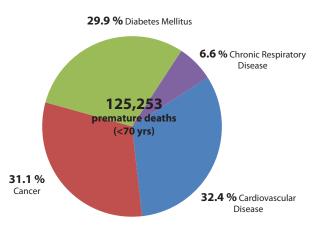
- Total population (thousands): 114,793.3
- Average annual deaths (thousands): 549.4
- Life expectancy at birth (years):

Total: 77.0 Male: 74.6 Female: 79.4

- Adult literacy rate (%): 93.4
- Gross National Income US\$ per capita: 8,960.0
- % of population covered by any type health insurance: **49.3**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 22.8 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 15.9 | 24.8 | 7.8 |
| Adolescent tobacco smokers | 28.6 | 27.8 | 28.5 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | | 5.7 | 2.9 |
| Low physical activity in adults ^b | 37.7 | 37.1 | 38.4 |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | | 42.7 | 37.4 |
| Obesity among adults (BMI ≥30) | | 26.1 | 35.6 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 7.6 | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 30.8 | 31.5 | 30.8 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | No |
| Are there plans for specific diseases? | Yes |
| Note: NS: Not specified. | |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | NS |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | NS |
| Established mechanisms for data dissemination? | NS |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | | |
| Blood lipids | Yes | \checkmark | |
| Individual risk management with a validated CV risk score | Yes | ⊘ | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | ⊘ | |
| Blood lipids monitoring | Yes | \checkmark | |
| HbA1C | Yes | ⊘ | |
| Diabetic foot examination | Yes | ⊘ | |
| Electrocardiogram | Yes | ⊘ | |

| | Available? | Fr | ee? |
|-------------------------------------|------------|--------------|--------------------|
| | | All patients | Limite resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | ✓ | |
| HPV DNA testing | N | ot specified | |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | N | ot specified | |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | ✓ | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | N | ot specified | |
| Digital exam | N | ot specified | |

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | \bigcirc | |
| Diagnostic mammography | Yes | \bigcirc | |
| Chemotherapy | Yes | | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | Not sp | pecified |
| Angioplasty | Yes | Not sp | pecified |

| | Available? | Free? | |
|--|------------|--------------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | \bigcirc | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yesª | Not s _t | pecified |

Notes: a: Available in some cities.

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------------------------|--|
| | Available: | All patients Limited resources | |
| Insulin | Yes | Not specified | |
| Aspirin | Yes | Not specified | |
| Metformin | Yes | Not specified | |
| Glibenclamide | Yes | Not specified | |
| Thiazide diuretics | Yes | Not specified | |
| ACE inhibitors | Yes | Not specified | |

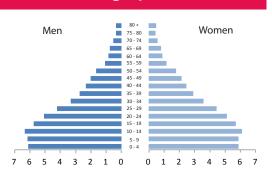
| | Available? | | Free? |
|------------------------------|---------------|---------------|-------------------|
| | Availables | All patients | Limited resources |
| Calcium channels blockers | Yes | Not specified | |
| Beta blockers | Yes | Not specified | |
| Statins | Yes | Not specified | |
| Tamoxifen | Not specified | | |
| Oral morphine | Not specified | | ed |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Blanca Estela Fernández García, Diabetes Program Coordinator, Secretary of Health, Mexico.



NCDs IN NICARAGUA

Sociodemographic indicators



Total population (thousands): 5,869.9

Average annual deaths (thousands): 27.5

Life expectancy at birth (years):

Total: **74.1** Male: **71.1** Female: **77.2**

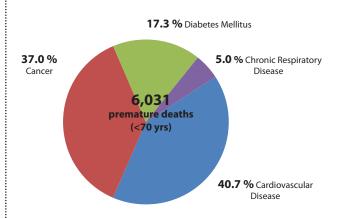
Adult literacy rate (%): 93.6

Gross National Income US\$ per capita: 1,000.0

% of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 21.9 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 20.4 | 33.2 | 8.4 |
| Adolescent tobacco smokers | 25.1 | 30.4 | 20.5 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | 12.7 | 21.3 | 5.2 |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 37.5 | 36.5 | 38.7 |
| Obesity among adults (BMI ≥30) | 29.1 | 23.8 | 34.2 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 5.2 | | |
| Adults with diabetes mellitus | 9.8 | 9.1 | 10.5 |
| Adults with raised BP and/or taking medication | 28.9 | 25.4 | 32.2 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | No |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | No |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |
| Note: N/A: Not applicable. | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | |
|---|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | Ø | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | | |
| Blood lipids | Yes | \checkmark | |
| Individual risk management with a validated CV risk score | Yes | | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | Ø | |
| Blood lipids monitoring | Yes | \bigcirc | |
| HbA1C | Yes | Ø | |
| Diabetic foot examination | Yes | | |
| Electrocardiogram | Yes | Not s _t | pecified |

| | | Free? | |
|-------------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | ✓ | |
| VIA & cryotherapy in a single visit | Yes | \bigcirc | |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | \bigcirc | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | ⊘ | |
| Digital exam | Yes | | |

Cardiovascular.

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | \bigcirc | |
| Diagnostic mammography | Yes | \bigcirc | |
| Chemotherapy | Yes | | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | N | o response | |
| Angioplasty | No | Not app | olicable |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | \checkmark |
| Photocoagulation for retinopahty | N | o response | |
| Dialysis | Yes | | \bigcirc |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \bigcirc | |
| Aspirin | Yes | \checkmark | |
| Metformin | Yes | \checkmark | |
| Glibenclamide | Yes | \checkmark | |
| Thiazide diuretics | Yes | | |
| ACE inhibitors | Yes | ✓ | |

| | Aveilable? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| Calcium channels blockers | Yes | Ø | |
| Beta blockers | Yes | \bigcirc | |
| Statins | Yes | | |
| Tamoxifen | Yes | ✓ | |
| Oral morphine | No | No | t applicable |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Wendy Idiaquez Mendoza, General Director of quality of care, Ministry of Health, Nicaragua.



NCDs IN PANAMA

Sociodemographic indicators



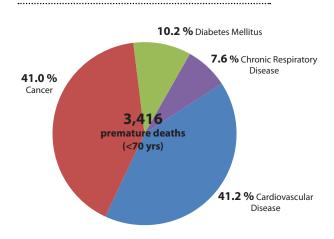
- Total population (thousands): 3,571.2
- Average annual deaths (thousands): 18.1
- Life expectancy at birth (years):

Total: **76.2** Male: **73.7** Female: **78.9**

- Adult literacy rate (%): 93.6
- Gross National Income US\$ per capita: 6,570.0
- % of population covered by any type health insurance: **65.7**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<**70 yrs**) account for **18.9%** of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 9.4 | 17.4 | 4.0 |
| Adolescent tobacco smokers | 8.4 | 10.5 | 6.5 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | | | |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 23.2 | 19.7 | 25.1 |
| Obesity among adults (BMI ≥30) | 3.0 | 2.0 | 4.1 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 6.2 | | |
| Adults with diabetes mellitus | 5.4 | 4.3 | 6.0 |
| Adults with raised BP and/or taking medication | 22.0 | 17.8 | 24.8 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | No |
| Budget? | N/A |
| Measurable outcomes? | N/A |
| Monitoring and evaluation component? | N/A |
| Communications component? | N/A |
| Are there plans for specific diseases? | NS |

Notes: NA: Not applicable; NS: Not specified.

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | No |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | No |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | Ø | |
| Blood pressure | Yes | \checkmark | |
| Blood glucose | Yes | | \bigcirc |
| Blood lipids | Yes | | \checkmark |
| Individual risk management with a validated CV risk score | Yes | | Ø |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | | \bigcirc |
| Blood glucose monitoring | Yes | | \checkmark |
| Blood lipids monitoring | Yes | | \checkmark |
| HbA1C | Yes | | \checkmark |
| Diabetic foot examination | Yes | | Ø |
| Electrocardiogram | Yes | | \checkmark |

| | | Fr | ee? |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | | ⊘ |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | | ✓ |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | No | Not ap | plicable |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; CV Cardiovascular

SPECIALIZED CARE

| | | Free? | | |
|--------------------------------|------------|--------------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | | \bigcirc | |
| Diagnostic mammography | Yes | | \bigcirc | |
| Chemotherapy | Yes | | \checkmark | |
| Radiotherapy | Yes | | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | Not s _i | pecified | |
| Angioplasty | Yes | Not s _i | pecified | |

| | | Fr | Free? | |
|--|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| DIABETES MANAGEMENT | | | | |
| Eye exams | Yes | | | |
| Photocoagulation for retinopahty | Yes | | ✓ | |
| Dialysis | Yes | | \bigcirc | |
| OTHER | | | | |
| Home care for patients with terminal or advanced disease | Yes | ⊘ | | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | | \bigcirc |
| Aspirin | Yes | | \bigcirc |
| Metformin | Yes | | \bigcirc |
| Glibenclamide | Yes | | \bigcirc |
| Thiazide diuretics | Yes | | \bigcirc |
| ACE inhibitors | Yes | | Ø |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | \bigcirc |
| Beta blockers | Yes | | \bigcirc |
| Statins | Yes | | \bigcirc |
| Tamoxifen | Yes | | Ø |
| Oral morphine | Yes | | \checkmark |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Elsa Cristina Arenas de Kant, NCDs National Program Coordinator, Ministry of Health, Panamá.



NCDs IN PARAGUAY

Sociodemographic indicators



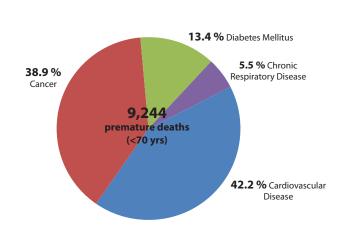
- Total population (thousands): 6,568.3
- Average annual deaths (thousands): 36.1
- Life expectancy at birth (years):

Total: 72.6 Male: 70.6 Female: 74.7

- Adult literacy rate (%): 94.6
- Gross National Income US\$ per capita: 2,250.0
- % of population covered by any type health insurance: 21.7

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 25.6 % of all deaths

RISK FACTORS

| Prevalence (%) of a: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 15.3 | 24.9 | 6.5 |
| Adolescent tobacco smokers | 8.3 | 11.3 | 5.5 |
| Fruit and vegetable intake in adults ^b | 6.3 | 10.7 | 9.2 |
| Fruit and vegetable intake in adolescents ^b | | | |
| Binge drinking among adults | 21.0 | 31.8 | 14.6 |
| Low physical activity in adults ^c | 23.9 | 19.0 | 28.4 |
| Low physical activity in adolescents ^d | 57.0 | | |
| Overweight among adults (BMI 25-29.9) | 39.8 | 41.0 | 38.8 |
| Obesity among adults (BMI ≥30) | 28.5 | 25.4 | 31.3 |
| Overweight among adolescents (BMI>+1SD) | 14.2 | | |
| Obesity among adolescents (BMI>+2SD) | 20.0 | | |
| Children <5 overweight | 6.3 | | |
| Adults with diabetes mellitus | 9.5 | 8.5 | 10.2 |
| Adults with raised BP and/or taking medication | 34.9 | 28.2 | 39.8 |

Notes: a: Adults aged 25-64; b: % who eat \leq 5 servings of fruit and vegetables per day; c: physically active for <600 met minutes; d: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? Is there an operational multisectoral | No |
|---|-----|
| Is there an operational multisectoral | |
| mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | No |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|-------------------------|----------------|-------------------|
| | Available? All patients | | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | ✓ | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | | \checkmark |
| Blood lipids | No | Not applicable | |
| Individual risk management with a validated CV risk score | No | Not applicable | |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | \checkmark | |
| Blood lipids monitoring | No | Not ap | plicable |
| HbA1C | Yes | | \checkmark |
| Diabetic foot examination | Yes | | ✓ |
| Electrocardiogram | No | Not ap | plicable |

| | | Fr | ee? |
|-------------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \bigcirc | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | ⊘ | |
| VIA & cryotherapy in a single visit | Yes | | Ø |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | | ✓ |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | No | Not ap | plicable |
| Digital exam | No | Not ap | plicable |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; C Cardiovascular.

SPECIALIZED CARE

| | | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | \bigcirc | | |
| Diagnostic mammography | Yes | | \bigcirc | |
| Chemotherapy | Yes | | \bigcirc | |
| Radiotherapy | No | Not ap | plicable | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | No | Not ap | plicable | |
| Angioplasty | No | Not ap | plicable | |

| | | Free? | |
|--|------------|----------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | \checkmark |
| Photocoagulation for retinopahty | No | Not applicable | |
| Dialysis | Yes | | ✓ |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | \bigcirc | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | ✓ | |

| | Available? | | Free? |
|---------------------------|------------|---------------|-------------------|
| | Availables | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | ✓ | |
| Statins | Yes | ✓ | |
| Tamoxifen | No | Not specified | |
| Oral morphine | No | Not specified | |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011./ First National Survey of NCDs Risk Factors, Paraguay, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Felicia Cañete, NCDs Director, Ministry of Health, Paraguay.



NCDs IN PERU

Sociodemographic indicators



Total population (thousands): 29,399.8

• Average annual deaths (thousands): **161.4**

Life expectancy at birth (years):

Total: 74.1 Male: 71.5 Female: 76.7

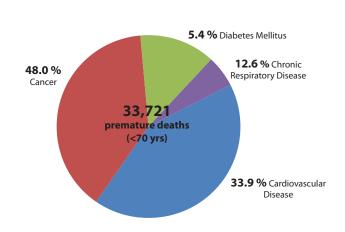
Adult literacy rate (%): 89.6

Gross National Income US\$ per capita: 4,200.0

% of population covered by any type health insurance: 23.5

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 20.9 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 18.4 | 29.4 | 9.4 |
| Adolescent tobacco smokers | 17.3 | 22.9 | 11.9 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 9.8 | 9.3 | 10.2 |
| Binge drinking among adults | | 5.6 | 0.3 |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 75.5 | 73.0 | 77.8 |
| Overweight among adults (BMI 25-29.9) | 47.9 | 43.3 | 52.2 |
| Obesity among adults (BMI ≥30) | 16.5 | 11.1 | 21.7 |
| Overweight among adolescents (BMI>+1SD) | 20.2 | 21.8 | 18.7 |
| Obesity among adolescents (BMI>+2SD) | 2.9 | 3.0 | 2.7 |
| Children <5 overweight | 9.8 | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 34.3 | 38.1 | 30.6 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | | \bigcirc |
| Blood pressure | Yes | | \checkmark |
| Blood glucose | Yes | | |
| Blood lipids | Yes | | |
| Individual risk management with a validated CV risk score | Yes | | Ø |
| DM AND CVD MANAGEMEN | TV | | |
| Blood pressure monitoring | Yes | | \checkmark |
| Blood glucose monitoring | Yes | | \bigcirc |
| Blood lipids monitoring | Yes | | \checkmark |
| HbA1C | No | Not ap | plicable |
| Diabetic foot examination | No | Not ap | plicable |
| Electrocardiogram | Yes | | Ø |

| | Available? | Fre | | ee? | |
|-------------------------------------|------------|--------------|-------------------|-----|--|
| | | All patients | Limited resources | | |
| CERVICAL CANCER | | | | | |
| Cervical cytology or PAP | Yes | | \bigcirc | | |
| HPV DNA testing | Yes | | \checkmark | | |
| Visual inspection techniques (VIA) | Yes | | | | |
| VIA & cryotherapy in a single visit | Yes | | Ø | | |
| BREAST CANCER | | | | | |
| Clinical examination | Yes | | \bigcirc | | |
| Mammography | Yes | | Ø | | |
| COLORECTAL CANCER | | | | | |
| Fecal occult blood test | Yes | | | | |
| Digital exam | Yes | | | | |

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | \checkmark |
| Diagnostic mammography | Yes | | ✓ |
| Chemotherapy | Yes | | \bigcirc |
| Radiotherapy | Yes | | \bigcirc |
| CVD MANAGEMENT | | | |
| Cardiac bypass | No | Not ap | plicable |
| Angioplasty | No | Not ap | plicable |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | No | Not ap | plicable |
| Photocoagulation for retinopahty | No | Not ap | plicable |
| Dialysis | No | Not ap | plicable |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

Cardiovascular.

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | | \checkmark |
| Aspirin | Yes | | \checkmark |
| Metformin | Yes | | \checkmark |
| Glibenclamide | Yes | | \bigcirc |
| Thiazide diuretics | Yes | | ✓ |
| ACE inhibitors | Yes | | Ø |

| | Available? | Free? | |
|------------------------------|------------|----------------|-------------------|
| | | All patients | Limited resources |
| Calcium channels blockers | No | Not applicable | |
| Beta blockers | Yes | | ✓ |
| Statins | Yes | | ⊘ |
| Tamoxifen | Yes | No | ot specified |
| Oral morphine | Yes | No | ot specified |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health inforamtion and analysis prject and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Aldo Tomás Tecse Silva, National Coordinator, Ministry of Health of Peru.



NCDs IN PUERTO RICO

Sociodemographic indicators



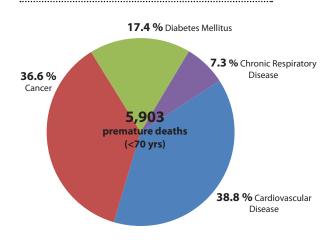
- Total population (thousands): 3,745.5
- Average annual deaths (thousands): 29.1
- Life expectancy at birth (years):

Total: **79.2** Male: **75.2** Female: **83.1**

- Adult literacy rate (%): 90.5
- Gross National Income US\$ per capita: ...
- % of population covered by any type health insurance: **92.0**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 20.3 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 10.6 | 13.8 | 7.7 |
| Adolescent tobacco smokers | | | |
| Fruit and vegetable intake in adults ^a | 17.7 | 17.1 | 18.3 |
| Fruit and vegetable intake in adolescents ^a | 80.7 | 78.6 | 82.5 |
| Binge drinking among adults | 10.6 | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 79.2 | 73.5 | 84.5 |
| Overweight among adults (BMI 25-29.9) | 37.7 | 41.4 | 34.4 |
| Obesity among adults (BMI ≥30) | 27.5 | 29.3 | 25.9 |
| Overweight among adolescents (BMI>+1SD) | 14.0 | 14.0 | 14.0 |
| Obesity among adolescents (BMI>+2SD) | 12.0 | 15.2 | 9.0 |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | 12.9 | 12.5 | 13.2 |
| Adults with raised BP and/or taking medication | 34.0 | 33.2 | 34.6 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Yes |
|-----|
| Yes |
| No |
| N/A |
| N/A |
| N/A |
| N/A |
| Yes |
| |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | No |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | No | Not ap | plicable |
| Blood pressure | Yes | | ✓ |
| Blood glucose | Yes | | Ø |
| Blood lipids | Yes | | Ø |
| Individual risk management with a validated CV risk score | Yes | | ⊘ |
| DM AND CVD MANAGEMEN | TV | | |
| Blood pressure monitoring | Yes | | Ø |
| Blood glucose monitoring | Yes | | ⊘ |
| Blood lipids monitoring | Yes | | Ø |
| HbA1C | No | Not ap | plicable |
| Diabetic foot examination | No | Not ap | plicable |
| Electrocardiogram | No | Not ap | plicable |

| | | Free? | |
|-------------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | | \bigcirc |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | | ⊘ |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | Ø |
| Digital exam | Yes | | ⊘ |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; C Cardiovascular.

SPECIALIZED CARE

| | Available? | Fr | Free? | |
|--------------------------------|------------|--------------|-------------------|--|
| | | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | | \checkmark | |
| Diagnostic mammography | Yes | | ✓ | |
| Chemotherapy | Yes | | \bigcirc | |
| Radiotherapy | Yes | | \bigcirc | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | | Ø | |
| Angioplasty | Yes | | ✓ | |

| | Available? | All | ee? |
|--|------------|----------|--------------|
| DIABETES MANAGEMENT | | patients | resources |
| Eye exams | Yes | | \checkmark |
| Photocoagulation for retinopahty | Yes | | ⊘ |
| Dialysis | Yes | | \bigcirc |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | | ⊘ |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|---------------|-------------------|
| | | All patients | Limited resources |
| Insulin | Yes | | \checkmark |
| Aspirin | Yes | Not specified | |
| Metformin | Yes | ✓ | |
| Glibenclamide | Yes | | \checkmark |
| Thiazide diuretics | Yes | | ⊘ |
| ACE inhibitors | Yes | | ✓ |

| | Available? | Free? | | |
|------------------------------|------------|---------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Calcium channels blockers | Yes | | \checkmark | |
| Beta blockers | Yes | | \bigcirc | |
| Statins | Yes | | \bigcirc | |
| Tamoxifen | Yes | Not specified | | |
| Oral morphine | Yes | No | ot specified | |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Leonardo Pérez Rivera, NCD Prevention and Health Promotion Program Manager, Department of Health, Puerto Rico.



NCDs IN SAINT KITTS AND NEVIS

Sociodemographic indicators



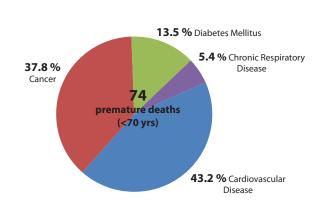
- Total population (thousands): 50.3
- Average annual deaths (thousands): 0.4
- Life expectancy at birth (years):

Total: 74.6 Male: 72.3 Female: 77.0

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: 10,150.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<**70 yrs**) account for **18.5** % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 8.7 | 16.2 | 1.1 |
| Adolescent tobacco smokers | 18.8 | 20.4 | 15.7 |
| Fruit and vegetable intake in adults ^a | 2.7 | 2.4 | 3.0 |
| Fruit and vegetable intake in adolescents ^a | 16.2 | 19.7 | 12.8 |
| Binge drinking among adults | | 27.1 | 20.1 |
| Low physical activity in adults ^b | 38.3 | 28.3 | 48.5 |
| Low physical activity in adolescents ^c | 19.7 | 13.6 | 24.9 |
| Overweight among adults (BMI 25-29.9) | 33.5 | 36.2 | 30.6 |
| Obesity among adults (BMI ≥30) | 45.0 | 37.9 | 52.5 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | 7.6 | 4.8 | 10.4 |
| Adults with raised BP and/or taking medication | 35.0 | 38.2 | 31.9 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| No |
|-----|
| N/A |
| No |
| N/A |
| N/A |
| N/A |
| N/A |
| No |
| |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | No |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | ✓ | |
| Blood pressure | Yes | ✓ | |
| Blood glucose | Yes | \bigcirc | |
| Blood lipids | Yes | | |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | | \bigcirc |
| Blood glucose monitoring | Yes | | Ø |
| Blood lipids monitoring | Yes | | \checkmark |
| HbA1C | Yes | | ⊘ |
| Diabetic foot examination | Yes | | ② |
| Electrocardiogram | Yes | | Ø |

| | | Fr | ee? |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | Ø | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | No | Not ap | plicable |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | ✓ | |
| Mammography | Yes | | ✓ |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | Ø | |

SPECIALIZED CARE

| | | Free? | ? |
|--------------------------------|------------|----------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | lacksquare |
| Diagnostic mammography | Yes | | $ \bigcirc $ |
| Chemotherapy | No | Not applicable | |
| Radiotherapy | No | Not applicable | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | No | Not appli | icable |
| Angioplasty | No | Not appli | icable |

| | Available? | Fr | ee? |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | | ⊘ |
| Dialysis | Yes | \bigcirc | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | | \checkmark |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | \bigcirc | |
| Metformin | Yes | \bigcirc | |
| Glibenclamide | Yes | | |
| Thiazide diuretics | Yes | \bigcirc | |
| ACE inhibitors | Yes | Ø | |

| | Available? | Free? | |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | \bigcirc | |
| Statins | Yes | | |
| Tamoxifen | No | No | t applicable |
| Oral morphine | No | No | t applicable |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Petrinella Edwards, NCDs Program Coordinator, Ministy of Health, St Kitts & Nevis.



NCDs IN SAINT LUCIA

Sociodemographic indicators



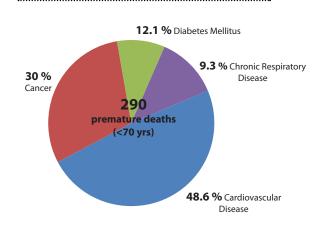
- Total population (thousands): 161.6
- Average annual deaths (thousands): 1.1
- Life expectancy at birth (years):

Total: 76.8 Male: 74.2 Female: 79.7

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: 5,190.0
- % of population covered by any type health insurance: 43.7

Burden of disease

PREMATURE DEATHS (2005)



Premature deaths from NCDs (<70 yrs) account for 25.7 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | 28.0 | 11.0 |
| Adolescent tobacco smokers | 7.8 | 9.8 | 6.2 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 25.4 | 25.2 | 25.6 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 84.4 | 82.6 | 86.0 |
| Overweight among adults (BMI 25-29.9) | 54.2 | 44.1 | 63.6 |
| Obesity among adults (BMI ≥30) | 22.3 | 11.9 | 31.9 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 4.3 | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 41.8 | 46.1 | 37.6 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | No |
| Communications component? | NS |
| Are there plans for specific diseases? | No |
| Notes: NS: Not specified. | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | NS |
| Is there a unique personal identifier? | NS |
| Use of data for policy making and planning? | NS |
| Established mechanisms for data dissemination? | NS |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | Available? | Fr | ee? |
|---|------------|--------------|-------------------|
| | | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | ✓ | |
| Blood pressure | Yes | | |
| Blood glucose | Yes | | |
| Blood lipids | Yes | | \bigcirc |
| Individual risk management with a validated CV risk score | Yes | Ø | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | Yes | | \bigcirc |
| HbA1C | Yes | | ⊘ |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | | \checkmark |

| | | Free? | |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | Ø | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | | ⊘ |
| VIA & cryotherapy in a single visit | No | Not ap | plicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | | Ø |
| Mammography | Yes | \bigcirc | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | Ø |
| Digital exam | Yes | | |

Cardiovascular.

SPECIALIZED CARE

| | | Fr | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|--|
| | Available? | All patients | Limited resources | | |
| CANCER DIAGNOSIS AND TREATMENT | | | | | |
| Colposcopy | Yes | | \bigcirc | | |
| Diagnostic mammography | Yes | | \checkmark | | |
| Chemotherapy | Yes | | \bigcirc | | |
| Radiotherapy | No | Not ap | plicable | | |
| CVD MANAGEMENT | | | | | |
| Cardiac bypass | No | Not ap | plicable | | |
| Angioplasty | No | Not ap | plicable | | |

| | Available? | Free? | |
|--|------------|----------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | |
| Photocoagulation for retinopahty | No | Not applicable | |
| Dialysis | Yes | | \checkmark |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \bigcirc | |
| Aspirin | Yes | | \checkmark |
| Metformin | Yes | \checkmark | |
| Glibenclamide | Yes | | \bigcirc |
| Thiazide diuretics | Yes | | \checkmark |
| ACE inhibitors | Yes | | Ø |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | | \bigcirc |
| Statins | Yes | | Ø |
| Tamoxifen | Yes | | \bigcirc |
| Oral morphine | Yes | | Ø |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Anne Margaret Henry, Principal Nursing Officer, Ministry of Health, St Lucia.



NCDs IN SURINAME

Sociodemographic indicators



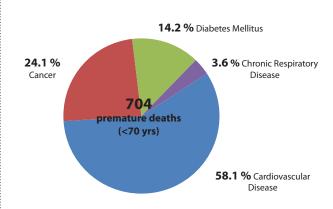
- Total population (thousands): 529.4
- Average annual deaths (thousands): 3.8
- Life expectancy at birth (years):

Total: 70.7 Male: 67.5 Female: 74.0

- Adult literacy rate (%): 94.6
- Gross National Income US\$ per capita: 4,760.0
- % of population covered by any type health insurance: **34.7**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 18.5 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 27.0 | | |
| Adolescent tobacco smokers | 12.1 | 14.0 | 10.1 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 31.0 | 33.0 | 29.2 |
| Binge drinking among adults | | 47.0 | 19.7 |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 45.6 | 44.4 | 46.7 |
| Overweight among adults (BMI 25-29.9) | 58.4 | 51.7 | 64.8 |
| Obesity among adults (BMI ≥30) | 25.8 | 16.5 | 34.6 |
| Overweight among adolescents (BMI>+1SD) | 19.8 | 19.6 | 19.9 |
| Obesity among adolescents (BMI>+2SD) | 6.7 | 6.4 | 7.0 |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | 19.5 | | |
| Adults with raised BP and/or taking medication | 33.0 | 34.2 | 26.7 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | |
|---|------------|---------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | | ✓ |
| Blood pressure | Yes | | \checkmark |
| Blood glucose | Yes | | \checkmark |
| Blood lipids | Yes | | \checkmark |
| Individual risk management with a validated CV risk score | Yes | Not specified | |
| DM AND CVD MANAGEMEN | TV | | |
| Blood pressure monitoring | Yes | | \bigcirc |
| Blood glucose monitoring | Yes | | ✓ |
| Blood lipids monitoring | Yes | | ⊘ |
| HbA1C | Yes | | Ø |
| Diabetic foot examination | Yes | | ⊘ |
| Electrocardiogram | Yes | | ⊘ |

| | | Fr | ee? |
|-------------------------------------|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | | \checkmark |
| HPV DNA testing | Yes | Not s _t | pecified |
| Visual inspection techniques (VIA) | Yes | | Ø |
| VIA & cryotherapy in a single visit | Yes | | Ø |
| BREAST CANCER | | | |
| Clinical examination | Yes | | Ø |
| Mammography | Yes | | \bigcirc |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | Ø |
| Digital exam | Yes | | Ø |

Notes: HPV: Human Papillomavirus; DM: Diabetes mellitus; CVD: Cardiovascular disease; CV Cardiovascular.

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | |
| Diagnostic mammography | Yes | | |
| Chemotherapy | Yes | | \bigcirc |
| Radiotherapy | Yes | | \bigcirc |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | Not s _i | pecified |
| Angioplasty | Yes | Not specified | |

| | | Free? | |
|--|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | |
| Photocoagulation for retinopahty | Yes | | |
| Dialysis | Yes | | \bigcirc |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | Not s _i | pecified |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | | All patients | Limited resources |
| Insulin | Yes | | \checkmark |
| Aspirin | Yes | | \checkmark |
| Metformin | Yes | | \checkmark |
| Glibenclamide | Yes | | \checkmark |
| Thiazide diuretics | Yes | | Ø |
| ACE inhibitors | Yes | | Ø |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | | \checkmark |
| Statins | Yes | | ⊘ |
| Tamoxifen | Yes | | ⊘ |
| Oral morphine | Yes | | Ø |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health inforamtion and analysis prject and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Maltie Algoe, Acting Director of Planning and NCD Focal Point, Ministry of Health, Suriname.



NCDs IN SAINT VINCENT AND THE GRENADINES

Men 75-80 Women 70-74 65-69 60-64 65-59 950-54 45-49 40-44 35-39 30-34 25-59 20-24 15-19 10-14 5-9 10-4

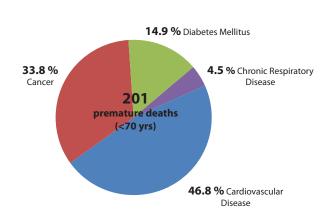
- Total population (thousands): 103.9
- Average annual deaths (thousands): 0.7
- Life expectancy at birth (years):

Total: 74.2 Male: 72.3 Female: 76.1

- Adult literacy rate (%): ...
- Gross National Income US\$ per capita: 5,130.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 28.7 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | 17.6 | 5.2 |
| Adolescent tobacco smokers | 8.5 | 12.0 | 5.1 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 38.3 | 38.9 | 38.0 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 86.7 | 84.4 | 88.6 |
| Overweight among adults (BMI 25-29.9) | 57.8 | 51.8 | 63.7 |
| Obesity among adults (BMI ≥30) | 25.1 | 16.4 | 33.5 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | | | |

Notes: a: % who eat \le 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | No |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | No |
| Budget? | N/A |
| Measurable outcomes? | N/A |
| Monitoring and evaluation component? | N/A |
| Communications component? | N/A |
| Are there plans for specific diseases? | No |
| Notes: N/A: Not applicable. | |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | No |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | \checkmark | |
| Blood lipids | Yes | | \bigcirc |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | \checkmark | |
| Blood lipids monitoring | Yes | | \bigcirc |
| HbA1C | Yes | | Ø |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | | \checkmark |

| | | Fr | ee? |
|-------------------------------------|------------|--------------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | | ⊘ |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | ✓ | |
| VIA & cryotherapy in a single visit | Yes | ✓ | |
| BREAST CANCER | | | |
| Clinical examination | Yes | ⊘ | |
| Mammography | Yes | Not s _i | pecified |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | | |
| Digital exam | Yes | | ⊘ |

Cardiovascular

SPECIALIZED CARE

| | Available? | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | | |
| Diagnostic mammography | Yes | | \bigcirc |
| Chemotherapy | Yes | | \bigcirc |
| Radiotherapy | No | Not ap | plicable |
| CVD MANAGEMENT | | | |
| Cardiac bypass | No | Not ap | plicable |
| Angioplasty | No | Not ap | plicable |

| | | Free? | |
|--|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | | \checkmark |
| Photocoagulation for retinopahty | No | Not ap | plicable |
| Dialysis | No | Not ap | plicable |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | | lacksquare |
| Metformin | Yes | | \checkmark |
| Glibenclamide | Yes | | \bigcirc |
| Thiazide diuretics | Yes | | \bigcirc |
| ACE inhibitors | Yes | | ⊘ |

| | Available? | | Free? |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | \checkmark |
| Beta blockers | Yes | | Ø |
| Statins | Yes | | \bigcirc |
| Tamoxifen | Yes | | ⊘ |
| Oral morphine | Yes | | ⊘ |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health inforamtion and analysis prject and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Jennifer George, National Epidemiologist, and Roger Duncan, Medical Officer of Health, Ministry of Health, Wellness and the Environment, St Vincent & the Grenadines.



NCDs IN TRINIDAD AND TOBAGO

Sociodemographic indicators



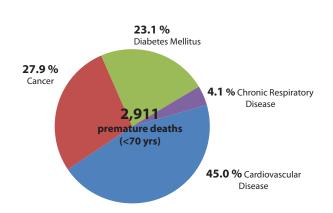
- Total population (thousands): 1,346.4
- Average annual deaths (thousands): 11.0
- Life expectancy at birth (years):

Total: **70.2** Male: **66.7** Female: **73.6**

- Adult literacy rate (%): 98.7
- Gross National Income US\$ per capita: 16,700.0
- % of population covered by any type health insurance: ...

Burden of disease

PREMATURE DEATHS (2006)



Premature deaths from NCDs (<70 yrs) account for 26.5 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | | 36.5 | 7.3 |
| Adolescent tobacco smokers | 9.3 | 9.7 | 8.7 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 24.6 | 24.8 | 24.3 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | 81.0 | 75.9 | 86.1 |
| Overweight among adults (BMI 25-29.9) | 64.7 | 59.7 | 69.6 |
| Obesity among adults (BMI ≥30) | 30 | 21.6 | 38.0 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 4.9 | | |
| Adults with diabetes mellitus | 6.5 | 4.7 | 8.1 |
| Adults with raised BP and/or taking medication | 23.0 | 20.0 | 25.0 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | No |
| Measurable outcomes? | No |
| Monitoring and evaluation component? | No |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | No |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Free? | |
|---|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \checkmark | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | \bigcirc | |
| Blood lipids | Yes | \bigcirc | |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \checkmark | |
| Blood glucose monitoring | Yes | \bigcirc | |
| Blood lipids monitoring | Yes | \checkmark | |
| HbA1C | Yes | | |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | Ø | |

| | | Free? | |
|-------------------------------------|------------|--------------|------------------|
| | Available? | All patients | Limited resource |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | lacksquare | |
| HPV DNA testing | No | Not ap | plicable |
| Visual inspection techniques (VIA) | Yes | Ø | |
| VIA & cryotherapy in a single visit | Yes | \checkmark | |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | Ø | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | \checkmark | |
| Digital exam | Yes | Ø | |

SPECIALIZED CARE

| | Available? | Free? | | |
|--------------------------------|------------|--------------|-------------------|--|
| | | All patients | Limited resources | |
| CANCER DIAGNOSIS AND TREATMENT | | | | |
| Colposcopy | Yes | | | |
| Diagnostic mammography | Yes | \bigcirc | | |
| Chemotherapy | Yes | \bigcirc | | |
| Radiotherapy | Yes | \bigcirc | | |
| CVD MANAGEMENT | | | | |
| Cardiac bypass | Yes | | | |
| Angioplasty | Yes | | ⊘ | |

| | Available? | Free? | | |
|--|------------|--------------|-------------------|--|
| | | All patients | Limited resources | |
| DIABETES MANAGEMENT | | | | |
| Eye exams | Yes | \checkmark | | |
| Photocoagulation for retinopahty | Yes | ⊘ | | |
| Dialysis | Yes | | ✓ | |
| OTHER | | | | |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | \checkmark | |
| Aspirin | Yes | \checkmark | |
| Metformin | Yes | ✓ | |
| Glibenclamide | Yes | \checkmark | |
| Thiazide diuretics | Yes | Ø | |
| ACE inhibitors | Yes | Ø | |

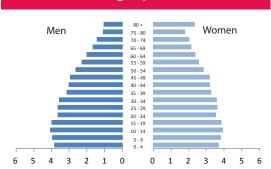
| | Available? | Free? | |
|------------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | \bigcirc | |
| Statins | Yes | | |
| Tamoxifen | Yes | ✓ | |
| Oral morphine | Yes | | |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Krishna Kumar Sundaraneedi and Karmesh LD Sharma, Medical Director, Health Programmes & Technical Support, Ministry of Health, Trinidad and Tobago.



NCDs IN URUGUAY

Sociodemographic indicators



Total population (thousands): 3,380.0

Average annual deaths (thousands): 31.3

Life expectancy at birth (years):

Total: 77.1 Male: 73.5 Female: 80.5

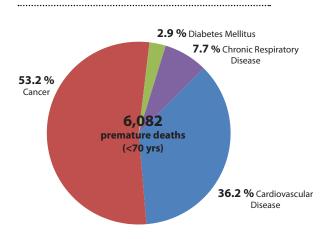
Adult literacy rate (%): 98.3

Gross National Income US\$ per capita: 9,010.0

% of population covered by any type health insurance: 87.5

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<**70 yrs**) account for **19.4** % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 36.0 | 40.8 | 31.7 |
| Adolescent tobacco smokers | 19.0 | 15.6 | 21.8 |
| Fruit and vegetable intake in adults ^a | 15.1 | 14.9 | 15.1 |
| Fruit and vegetable intake in adolescents ^a | 22.5 | 22.4 | 22.6 |
| Binge drinking among adults | | 17.4 | 7.9 |
| Low physical activity in adults ^b | 35.1 | 29.0 | 40.7 |
| Low physical activity in adolescents ^c | 29.0 | 29.9 | 26.2 |
| Overweight among adults (BMI 25-29.9) | 36.7 | 40.7 | 32.5 |
| Obesity among adults (BMI ≥30) | 19.9 | 19.4 | 20.5 |
| Overweight among adolescents (BMI>+1SD) | 14.8 | 18.1 | 11.8 |
| Obesity among adolescents (BMI>+2SD) | 2.2 | 2.8 | 1.6 |
| Children <5 overweight | 9.4 | | |
| Adults with diabetes mellitus | 5.5 | 6.2 | 4.7 |
| Adults with raised BP and/or taking medication | 31.9 | 32.6 | 31.4 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Yes |
|-----|
| No |
| No |
| N/A |
| N/A |
| N/A |
| N/A |
| Yes |
| |

| Is there a budget? | Yes |
|---|-----|
| Is there dedicated staff? | Yes |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | Yes |
| Risk factors surveys | Yes |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | Available? | Fr | ee? |
|---|------------|--------------|-------------------|
| | | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | ⊘ | |
| Blood pressure | Yes | ⊘ | |
| Blood glucose | Yes | | |
| Blood lipids | Yes | ⊘ | |
| Individual risk management with a validated CV risk score | Yes | ⊘ | |
| DM AND CVD MANAGEMEN | NT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | \checkmark | |
| Blood lipids monitoring | Yes | \bigcirc | |
| HbA1C | Yes | | Ø |
| Diabetic foot examination | Yes | | |
| Electrocardiogram | Yes | | \checkmark |

| | | Fr | Free? | |
|-------------------------------------|------------|--------------------|-------------------|--|
| | Available? | All patients | Limited resources | |
| CERVICAL CANCER | | | | |
| Cervical cytology or PAP | Yes | ⊘ | | |
| HPV DNA testing | Yes | Not s _i | pecified | |
| Visual inspection techniques (VIA) | Yes | | ⊘ | |
| VIA & cryotherapy in a single visit | No | Not ap | plicable | |
| BREAST CANCER | | | | |
| Clinical examination | Yes | \checkmark | | |
| Mammography | Yes | \bigcirc | | |
| COLORECTAL CANCER | | | | |
| Fecal occult blood test | Yes | | | |
| Digital exam | Yes | | | |

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | \checkmark | |
| Diagnostic mammography | Yes | \bigcirc | |
| Chemotherapy | Yes | | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | \checkmark | |
| Angioplasty | Yes | \bigcirc | |

| | Available? | Fr All patients | ee? Limited resources |
|--|------------|-----------------------|-----------------------|
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | ⊘ | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | ✓ | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | | Free? |
|--------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Insulin | Yes | | \checkmark |
| Aspirin | Yes | | \checkmark |
| Metformin | Yes | | \checkmark |
| Glibenclamide | Yes | | \bigcirc |
| Thiazide diuretics | Yes | | ⊘ |
| ACE inhibitors | Yes | | ✓ |

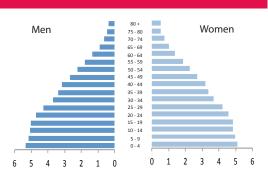
| | Available? | | Free? |
|------------------------------|------------|--------------|--------------------------|
| | Availables | All patients | Limited resources |
| Calcium channels blockers | Yes | | $ \checkmark $ |
| Beta blockers | Yes | | \bigcirc |
| Statins | Yes | | ⊘ |
| Tamoxifen | Yes | | $\overline{\mathscr{O}}$ |
| Oral morphine | Yes | | \checkmark |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health information and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
- » Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).
- » Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Clara Niz Larrosa, NCDs Coordinator, Ministry of Public Health, Uruguay.



NCDs IN VENEZUELA

Sociodemographic indicators



Total population (thousands): 29,436.9

Average annual deaths (thousands): 153.1

Life expectancy at birth (years):

Total: 74.5 Male: 71.6 Female: 77.5

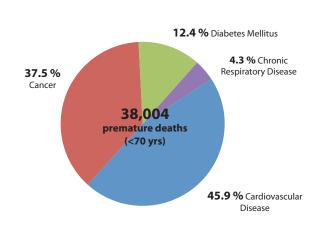
Adult literacy rate (%): 95.2

Gross National Income US\$ per capita: 10,090.0

% of population covered by any type health insurance: **65.0**

Burden of disease

PREMATURE DEATHS (2007)



Premature deaths from NCDs (<70 yrs) account for 24.8 % of all deaths

RISK FACTORS

| Prevalence (%) of: | Total | Males | Females |
|--|-------|-------|---------|
| Current adult tobacco smokers | 18.0 | 22.6 | 13.6 |
| Adolescent tobacco smokers | | 18.7 | 13.0 |
| Fruit and vegetable intake in adults ^a | | | |
| Fruit and vegetable intake in adolescents ^a | 16.7 | 16.9 | 16.5 |
| Binge drinking among adults | | | |
| Low physical activity in adults ^b | | | |
| Low physical activity in adolescents ^c | | | |
| Overweight among adults (BMI 25-29.9) | 67.5 | 67.9 | 67.0 |
| Obesity among adults (BMI ≥30) | 30.8 | 26.6 | 34.8 |
| Overweight among adolescents (BMI>+1SD) | | | |
| Obesity among adolescents (BMI>+2SD) | | | |
| Children <5 overweight | 6.1 | | |
| Adults with diabetes mellitus | | | |
| Adults with raised BP and/or taking medication | 41.0 | 46.3 | 35.6 |

Notes: a: % who eat \leq 5 servings of fruit and vegetables per day; b: physically active for <600 met minutes; c: physically active less than 60 min per day in 5-7 of the last 7 days; BP: Blood pressure.

Country capacity

POLICIES & ACTION PLANS

| Is there an integrated NCD policy? | Yes |
|---|-----|
| Is there an operational multisectoral mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? If the answer is yes, does it have: | Yes |
| Budget? | Yes |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

| Is there a budget? | No |
|---|-----|
| Is there dedicated staff? | No |
| Does the information system include specific data | on? |
| Specific cause of mortality | Yes |
| Hospital based morbidity | No |
| Risk factors surveys | No |
| Are there disease specific registries? | Yes |
| Is there a unique personal identifier? | Yes |
| Use of data for policy making and planning? | No |
| Established mechanisms for data dissemination? | No |

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

| | | Fr | ee? |
|--|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CVD RISK ASSESSMENT | | | |
| BMI | Yes | \bigcirc | |
| Blood pressure | Yes | \bigcirc | |
| Blood glucose | Yes | Ø | |
| Blood lipids | Yes | \bigcirc | |
| Individual risk management with a validated CV risk score ^a | Yes | ⊘ | |
| DM AND CVD MANAGEMEN | IT | | |
| Blood pressure monitoring | Yes | \bigcirc | |
| Blood glucose monitoring | Yes | Ø | |
| Blood lipids monitoring | Yes | \checkmark | |
| HbA1C | Yes | ⊘ | |
| Diabetic foot examination | Yes | Ø | |
| Electrocardiogram | Yes | Ø | |

| | | Fr | ee? |
|---------------------------------------|------------|----------------|-------------------|
| | Available? | All patients | Limited resources |
| CERVICAL CANCER | | | |
| Cervical cytology or PAP | Yes | \checkmark | |
| HPV DNA testing | Yes | \checkmark | |
| Visual inspection techniques (VIA) | Yes | \checkmark | |
| VIA & cryotherapy in a single visit | No | Not ap | pplicable |
| BREAST CANCER | | | |
| Clinical examination | Yes | Ø | |
| Mammography | Yes | \bigcirc | |
| COLORECTAL CANCER | | | |
| Fecal occult blood test | Yes | ✓ | |
| Digital exam | Yes | $ \checkmark $ | |

Cardiovascular.

SPECIALIZED CARE

| | | Free? | |
|--------------------------------|------------|--------------|-------------------|
| | Available? | All patients | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT | | | |
| Colposcopy | Yes | \bigcirc | |
| Diagnostic mammography | Yes | | |
| Chemotherapy | Yes | \checkmark | |
| Radiotherapy | Yes | \bigcirc | |
| CVD MANAGEMENT | | | |
| Cardiac bypass | Yes | \checkmark | |
| Angioplasty | Yes | \checkmark | |

| | Available? | Free? | |
|--|------------|--------------|-------------------|
| | | All patients | Limited resources |
| DIABETES MANAGEMENT | | | |
| Eye exams | Yes | \checkmark | |
| Photocoagulation for retinopahty | Yes | ⊘ | |
| Dialysis | Yes | \bigcirc | |
| OTHER | | | |
| Home care for patients with terminal or advanced disease | Yes | | |

NON COMMUNICABLE DISEASES MEDICINES

| | Available? | Free? | | |
|--------------------|------------|--------------|-------------------|--|
| | Available: | All patients | Limited resources | |
| Insulin | Yes | | | |
| Aspirin | Yes | lacksquare | | |
| Metformin | Yes | \bigcirc | | |
| Glibenclamide | Yes | lacksquare | | |
| Thiazide diuretics | Yes | Ø | | |
| ACE inhibitors | Yes | ⊘ | | |

| | Available? | Free? | |
|---------------------------|------------|--------------|-------------------|
| | Available: | All patients | Limited resources |
| Calcium channels blockers | Yes | | |
| Beta blockers | Yes | \bigcirc | |
| Statins | Yes | \bigcirc | |
| Tamoxifen | Yes | \bigcirc | |
| Oral morphine | Yes | Ø | |

- Sociodemographic indicators and risk factors: Pan American Health Organization. Non communicable disease project, health inforamtion and analysis project and sustainable development and environment area: Non communicable diseases in the Americas: Basic indicators 2011, Washington DC, USA, 2011.
 Premature mortality: PAHO/WHO Mortality Information System (updated on May 2011).



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