# COUNTRY PROFILES ON NONCOMMUNICABLE DISEASES 



## COUNTRY PROFILES ON NONCOMMUNICABLE DISEASES

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## INDEX OF COUNTRIES

Antigua and Barbuda ..... 1
Argentina ..... 3
Bahamas ..... 5
Barbados ..... 7
Belize ..... 9
Bolivia ..... 11
Brazil ..... 13
Chile ..... 15
Colombia ..... 17
Costa Rica ..... 19
Cuba ..... 21
Dominica ..... 23
Dominican Republic ..... 25
Ecuador ..... 27
El Salvador ..... 29
Grenada ..... 31
Guatemala ..... 33
Guyana ..... 35
Honduras ..... 37
Jamaica ..... 39
Mexico ..... 41
Nicaragua ..... 43
Panama ..... 45
Paraguay ..... 47
Peru ..... 49
Puerto Rico ..... 51
Saint Kitts and Nevis ..... 53
Saint Lucia ..... 55
Suriname ..... 57
Saint Vincent and The Granadines ..... 59
Trinidad and Tobago ..... 61
Uruguay ..... 63
Venezuela ..... 65

## 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): $\mathbf{8 7 . 9}$
- Average annual deaths (thousands): 0.5
- Life expectancy at birth (years):

Total: $\mathbf{7 5 . 5}$ Male: $\mathbf{7 3 . 5}$ Female: $\mathbf{7 7 . 6}$

- 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 $\mathbf{2 2 . 0} \%$ of all deaths

## RISK FACTORS

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

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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? | No |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| CVD RISK ASSESSMENT |  |  |  |
| BMI | Yes | ( |  |
| Blood pressure | Yes | 1 |  |
| Blood glucose | Yes | ( |  |
| Blood lipids | Yes |  | ( |
| Individual risk management with a validated CV risk score | No | Not ap | plicable |
| DM AND CVD MANAGEMENT |  |  |  |
| Blood pressure monitoring | Yes | ( |  |
| Blood glucose monitoring | Yes | ( |  |
| Blood lipids monitoring | Yes | ( |  |
| HbA1C | Yes |  | ( |
| Diabetic foot examination | Yes | ( |  |
| Electrocardiogram | Yes |  | $\bigcirc$ |

$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :---: |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | No | Not applicable |
| Radiotherapy | No | Not applicable |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass |  |  |
| Angioplasty |  |  |

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline & & \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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

## 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): $\mathbf{3 1 5 . 6}$
- Life expectancy at birth (years):

Total: 76.0 Male: $\mathbf{7 2 . 2}$ Female: $\mathbf{7 9 . 7}$

- Adult literacy rate (\%): 97.7
- Gross National Income US\$ per capita: 7,550.0
- \% of population covered by any type health insurance: $\mathbf{6 2 . 0}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 0 . 8} \%$ 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 ${ }^{\text {a }}$ | 4.6 | 4.1 | 5.0 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 14.0 | 13.6 | 14.4 |
| Binge drinking among adults | 8.4 | 14.3 | 3.2 |
| Low physical activity in adults ${ }^{\text {b }}$ | 54.5 | 52.2 | 56.5 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 78.5 | 70.8 | 85.1 |
| Overweight among adults (BMI 25-29.9) | 36.7 | 45.9 | 28.4 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |
| :--- | :--- | :--- |
| All patients | Limited resources |  |
| Calcium channels <br> blockers | No | Not applicable | | Beta blockers | Yes | Not specified |
| :--- | :--- | :--- |
| Statins | No | Not applicable |
| Tamoxifen | Yes |  |
| Oral morphine | Yes |  |

## NCDs IN BAHAMAS

## Sociodemographic indicators

- Total population (thousands): $\mathbf{3 4 7 . 2}$
- Average annual deaths (thousands):
- Life expectancy at birth (years):

Total: $\mathbf{7 5 . 7}$ Male: $\mathbf{7 2 . 5}$ Female: $\mathbf{7 8 . 6}$

- Adult literacy rate (\%): ...
- Gross National Income US\$ per capita:
- \% of population covered by any type health insurance: $\mathbf{5 1 . 4}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 9 . 8} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | ... | ... | ... |
| Overweight among adults (BMI 25-29.9) | 33.9 | 35.0 | 22.7 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

|  | Available? | Free? <br> All <br> patients | Limited <br> resources |
| :--- | :--- | :--- | :--- |
| CVD RISK ASSESSMENT |  |  |  |
| BMI | Yes |  |  |
| Blood pressure | Yes |  |  |
| Blood glucose | Yes |  |  |
| Blood lipids | Yes |  |  |
| Individual risk management <br> with a validated CV risk score | Yes |  |  |
| DM AND CVD MANAGEMENT |  |  |  |
| Blood pressure monitoring | Yes |  |  |
| Blood glucose monitoring | Yes |  |  |
| Blood lipids monitoring | Yes |  |  |
| HbA1C | Yes |  |  |
| Diabetic foot examination | Yes |  |  |
| Electrocardiogram | Yes |  |  |

$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Lesited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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


|  | Free? |  |
| :--- | :--- | :--- |
|  | Available? | $\begin{array}{c}\text { All } \\ \text { patients }\end{array}$ |
| DIABETES MANAGEMENT |  |  |
| resources |  |  |$\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |
| :--- | :--- | :--- |
| All patients | Limited resources |  |
| Calcium channels <br> blockers | Yes |  |
| Beta blockers | Yes |  |
| Statins | Yes |  |
| Tamoxifen | Yes |  |
| Oral morphine | Yes |  |

## NCDs IN BARBADOS

## Sociodemographic indicators



- Total population (thousands): $\mathbf{2 8 6 . 7}$
- Average annual deaths (thousands): $\mathbf{2 . 4}$
- Life expectancy at birth (years):

Total: 74.3 Male: $\mathbf{7 2 . 1}$ Female: $\mathbf{7 6 . 6}$

- Adult literacy rate (\%): ...
- Gross National Income US\$ per capita: ..
- \% of population covered by any type health insurance: $\mathbf{2 5 . 0}$


## Burden of disease

PREMATURE DEATHS (2006)

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 ${ }^{\text {a }}$ | 4.6 | 3.4 | 5.7 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | ... | 21.9 | 9.7 |
| Low physical activity in adults ${ }^{\text {b }}$ | 51.3 | 42.5 | 59.0 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | ... | ... | ... |
| Overweight among adults (BMI 25-29.9) | 36.7 | 34.3 | 38.8 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { All } \\ \text { patee? } \\ \text { patients }\end{array} \\ \hline \text { LIABited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | 1 |  |
| Aspirin | Yes | 1 |  |
| Metformin | Yes | 1 |  |
| Glibenclamide | Yes | 1 |  |
| Thiazide diuretics | Yes | 1 |  |
| ACE inhibitors | Yes | ( |  |


|  | Available? | All patients | Free? <br> Limited resources |
| :--- | :--- | :--- | :--- |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes | Yes |  |
| Tamoxifen | Yes | Cral morphine |  |
| Oral |  |  |  |

## 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.

Regional office of the
World Health Organization

## NCDs IN BELIZE

## Sociodemographic indicators



- Total population (thousands): $\mathbf{3 1 7 . 9}$
- Average annual deaths (thousands): $\mathbf{1 . 2}$
- Life expectancy at birth (years):

Total: $\mathbf{7 6 . 1}$ Male: $\mathbf{7 4 . 7}$ Female: $\mathbf{7 7 . 6}$

- 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)

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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | 7.6 | 13.1 | 2.7 |
| Low physical activity in adults ${ }^{\text {b }}$ | 42.7 | 40.4 | 45.0 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | ... | ... | ... |
| Overweight among adults (BMI 25-29.9) | 72.3 | 66.1 | 78.1 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :---: |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes | Not specified |
| Colposcopy | Yes |  |
| Diagnostic mammography | No | Not applicable |
| Chemotherapy | No | Not applicable |
| Radiotherapy | No | Not applicable |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass |  |  |
| Angioplasty |  |  |


|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited |  |  |
| resources |  |  |$|$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | ( |  |
| Aspirin | Yes | ( |  |
| Metformin | Yes | ( |  |
| Glibenclamide | Yes | ( |  |
| Thiazide diuretics | Yes | ( |  |
| ACE inhibitors | 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 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): $\mathbf{7 2 . 9}$
- Life expectancy at birth (years):

Total: 66.8 Male: $\mathbf{6 4 . 5}$ Female: $\mathbf{6 9 . 1}$

- Adult literacy rate (\%): $\mathbf{9 0 . 7}$
- 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 $\mathbf{5 7} \%$ of all deaths

* Estimates based on a combination of country life tables, cuase of death models, regional cause of death partterns, and WHO and UNAIDS program estimates

RISK FACTORS

| Prevalence (\%) of: | Total | Males | Females |
| :--- | :---: | :---: | :---: |
| Current adult tobacco smokers | $\ldots$. | 35.8 | 29.8 |
| Adolescent tobacco smokers | 20.8 | 24.7 | 16.6 |
| Fruit and vegetable intake in adults ${ }^{\mathrm{a}}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Fruit and vegetable intake in adolescents ${ }^{\mathrm{a}}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Binge drinking among adults | $\ldots$. | $\ldots$ | $\ldots$ |
| Low physical activity in adults ${ }^{\text {b }}$ | $\ldots .$. | $\ldots$ | $\ldots$ |
| Low physical activity in adolescents $^{\mathrm{c}}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Overweight among adults (BMI 25-29.9) | 50.0 | 40.4 | 58.9 |
| Obesity among adults (BMI $\geq 30$ ) | 18.9 | 10.0 | 27.1 |
| Overweight among adolescents (BMI>+1SD) | $\ldots$ | $\ldots$ | $\ldots$ |
| Obesity among adolescents (BMI>+2SD) | $\ldots$. | $\ldots$ | $\ldots$ |
| Children <5 overweight | 8.7 | $\ldots$ | $\ldots$ |
| Adults with diabetes mellitus | $\ldots$. | $\ldots$ | $\ldots$ |
| 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; $B P$ : Blood pressure.

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

## PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

|  | Available? | Free? <br> All <br> patientsLimited <br> resources |
| :--- | :--- | :--- |
| CVD RISK ASSESSMENT | Yes | Not specified |
| BMI | Yes | Not specified |
| Blood pressure | No | Not applicable |
| Blood glucose | Yes | Not specified |
| Blood lipids | Yes | Not specified |
| Individual risk management | Yes | Not specified |
| with a validated CV risk score | No | Not applicable |
| DM AND CVD MANAGEMENT | No | Not applicable |
| Blood pressure monitoring | Yes | Not specified |
| Blood glucose monitoring | No | Not applicable |
| Blood lipids monitoring |  |  |
| HbA1C |  |  |
| Diabetic foot examination | Electrocardiogram |  |


|  | Free? |  |
| :--- | :---: | :---: |
| Available? | All <br> patients | Limited <br> resources |

CERVICAL CANCER

| Cervical cytology or PAP | Not specified |
| :--- | :--- |
| HPV DNA testing | Not specified |
| Visual inspection techniques <br> (VIA) | Not specified |
| VIA \& cryotherapy in a single <br> visit | Not specified |


| BREAST CANCER |  |  |
| :--- | :--- | :--- |
| Clinical examination | No | Not applicable |
| Mammography | No | Not applicable |
| COLORECTAL CANCER |  |  |
| Fecal occult blood test | No | Not applicable |
| Digital exam | No | Not applicable |

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

SPECIALIZED CARE

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


|  | Free? |  |
| :---: | :---: | :---: |
|  | Available? | All Limited <br> patients <br> resources  |
| DIABETES MANAGEMENT |  |  |
| Eye exams | Yes | Not specified |
| Photocoagulation for retinopahty | Yes | Not specified |
| Dialysis | Yes | 2 |
| OTHER |  |  |
| Home care for patients with terminal or advanced disease | No | Not applicable |

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |
| :--- | :--- | :--- |
|  | 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 | Not free |  |


|  | Available? | All patients |
| :--- | :--- | :--- | | Free? |
| :--- |
| Limited resources |$|$| Calcium channels <br> 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: $\mathbf{7 3 . 7}$ Male: $\mathbf{7 0 . 3}$ Female: $\mathbf{7 7 . 1}$

- Adult literacy rate (\%): 90.0
- Gross National Income US\$ per capita: 8,070.0
- \% of population covered by any type health insurance: $\mathbf{1 0 0}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 7 . 6} \%$ 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 ${ }^{\text {a }}$ | 18.8 | 16.0 | 21.3 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | 19.0 | 28.7 | 10.6 |
| Low physical activity in adults ${ }^{\text {b }}$ | 12.1 | 14.7 | 9.9 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 56.9 | 43.8 | 68.7 |
| Overweight among adults (BMI 25-29.9) | 42.5 | 48.6 | 36.5 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 integrated NCD policy? | Yes |
| :--- | ---: |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> If the answer is yes, does it have: | Yes |
| Budget? | Not specified |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | Yes |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

## SURVEILLANCE

| 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? | Not specified |
| Use of data for policy making and planning? | Yes |
| Established mechanisms for data dissemination? | Yes |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | Yes | ( |
| Radiotherapy |  |  |
| CVD MANAGEMENT | Yes | Yes |
| Cardiac bypass |  |  |
| Angioplasty |  |  |


|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| DIABETES MANAGEMENT |  |  |  |
| Eye exams | Yes | $\checkmark$ |  |
| Photocoagulation for retinopahty | Yes | $(2$ |  |
| Dialysis | Yes | 2 |  |
| OTHER |  |  |  |
| Home care for patients with terminal or advanced disease | Yes | Nots | ecified |

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? <br> Limited resources |  |
| :--- | :---: | :---: | :---: |
| Insulin | Yes |  |  |
| Aspirin | Yes |  |  |
| Metformin | Yes | $C$ |  |
| Glibenclamide | Yes | Not specified |  |
| Thiazide diuretics | Yes | $C$ |  |
| ACE inhibitors | Yes |  |  |


|  | Available? |  |
| :--- | :--- | :--- |
| All patients | Free? <br> Limited resources |  |
| Calcium channels <br> blockers | Yes |  |
| Beta blockers | Yes |  |
| Statins | Yes |  |
| Tamoxifen | Yes |  |
| Oral morphine | Yes |  |

Sociodemographic indicators


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

Total: 79.2 Male: $\mathbf{7 6 . 1}$ Female: $\mathbf{8 2 . 2}$

- Adult literacy rate (\%): 98.6
- Gross National Income US\$ per capita: 9,470.0
- \% of population covered by any type health insurance: $\mathbf{8 9 . 0}$


## Burden of disease

PREMATURE DEATHS (2007)

RISK FACTORS

| Prevalence (\%) of ${ }^{\text {a : }}$ | 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 ${ }^{\text {b }}$ | 15.8 | 13.6 | 17.9 |
| Fruit and vegetable intake in adolescents $^{\text {b }}$ | 23.2 | 23.1 | 23.2 |
| Binge drinking among adults | 30.8 | 45 | 17 |
| Low physical activity in adults $^{\text {c }}$ | 75.4 | 79.1 | 71.8 |
| Low physical activity in adolescents $^{\text {d }}$ | 79.9 | 72.6 | 87.4 |
| Overweight among adults (BMI 25-29.9) | 42.8 | 51.1 | 34.7 |
| Obesity among adults (BMI $\geq 30$ ) | 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 | $\ldots$. | $\ldots$. |
| 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 <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right)$

SPECIALIZED CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? |  | Free? |
| :--- | :--- | :---: | :--- |
| All patients |  |  |  |
| Limited resources |  |  |  |

## 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 surveiilance 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: $\mathbf{7 3 . 8}$ Male: $\mathbf{7 0 . 2}$ Female: $\mathbf{7 7 . 5}$

- Adult literacy rate (\%): 93.2
- Gross National Income US\$ per capita: 4,990.0
- \% of population covered by any type health insurance: $\mathbf{8 4 . 9}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 2 . 7} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 15.5 | 13.2 | 17.4 |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | 79 | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 84.9 | 81.9 | 87.2 |
| Overweight among adults (BMI 25-29.9) | 32.3 | ... | ... |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

## PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes | 0 |
| Diagnostic mammography | Yes |  |
| Chemotherapy | Yes | 0 |
| Radiotherapy |  |  |
| CVD MANAGEMENT | Yes | Not specified |
| Cardiac bypass | Yes | Not specified |
| Angioplasty |  |  |

$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? <br> 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 |

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).
$\left.\begin{array}{lll} & \text { Available? } & \text { All patients }\end{array} \begin{array}{l}\text { Free? } \\ \text { Limited resources }\end{array}\right]$ Not specified.

## 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: $\mathbf{7 7 . 0}$ Female: $\mathbf{8 1 . 9}$

- Adult literacy rate (\%): $\mathbf{9 6 . 1}$
- Gross National Income US\$ per capita: 6,260.0
- \% of population covered by any type health insurance: $\mathbf{8 7 . 6}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{1 7 . 4} \%$ 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 ${ }^{\text {a }}$ | 22.3 | 24.2 | 20.4 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 19.5 | 21.4 | 17.6 |
| Binge drinking among adults | 6.2 | 9.5 | 3.2 |
| Low physical activity in adults ${ }^{\text {b }}$ | 50.9 | 38.6 | 63.4 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 72.6 | 64.1 | 81.0 |
| Overweight among adults (BMI 25-29.9) | 36.1 | 37.2 | 34.8 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

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

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

|  | Available? | Free? <br> patients |
| :--- | :--- | :---: |
| CERVICAL CANCER |  |  |
| Cervited |  |  |
| resources cytology or PAP | Yes | Not applicable |
| HPV DNA testing | No |  |
| Visual inspection techniques <br> (VIA) | Yes | Yes |
| VIA \& cryotherapy in a single <br> visit | Yes | Yes |
| BREAST CANCER | Yes | Clinical examination |
| Mammography | Yes | COLORECTAL CANCER |
| Fecal occult blood test |  |  |
| Digital exam |  |  |

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

## SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  |  |  | Free? |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Available? | All patients | Limited resources |  |
| Insulin | Yes | 0 |  |  |
| Aspirin | Yes | 0 |  |  |
| Metformin | Yes | 0 |  |  |
| Glibenclamide | Yes | 0 |  |  |
| Thiazide diuretics | Yes | 0 |  |  |
| ACE inhibitors | Yes | 0 |  |  |

## 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.


- Total population (thousands): 11,253.7
- Average annual deaths (thousands): $\mathbf{8 3 . 9}$
- Life expectancy at birth (years):

Total: $\mathbf{7 9 . 2}$ Male: $\mathbf{7 7 . 2}$ Female: $\mathbf{8 1 . 2}$

- Adult literacy rate (\%): 99.8
- Gross National Income US\$ per capita: 5,550.0
- \% of population covered by any type health insurance: $\mathbf{1 0 0 . 0}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 5 . 5} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | $\ldots$ | ... | ... |
| Overweight among adults (BMI 25-29.9) | 42.5 | 37.7 | 47.0 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 20.5 | 13.3 | 27.5 |
| Overweight among adolescents (BMI>+1SD) | ... | ... | ... |
| Obesity among adolescents (BMI>+2SD) | ... | ... | ... |
| Children <5 overweight | $\ldots$ | ... | ... |
| Adults with diabetes mellitus | ... | ... | ... |
| Adults with raised BP and/or taking medication | 28.8 | 26.7 | 31.0 |

## Country capacity

## POLICIES \& ACTION PLANS

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

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? |  | Free? <br> All patients |
| :--- | :--- | :--- | :--- |
| Limited resources |  |  |  |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| 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 Orlando Landrove Rodríguez, National NCD Program Coordinator, Ministry of Health, Cuba

## NCDs IN DOMINICA

## Sociodemographic indicators



- Total population (thousands): $\mathbf{7 3 . 0}$
- Average annual deaths (thousands): $\mathbf{0 . 6}$
- Life expectancy at birth (years):

Total: 76.0 Male: $\mathbf{7 3 . 0}$ Female: $\mathbf{7 9 . 1}$

- 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 $\mathbf{1 7 . 8} \%$ 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 ${ }^{\text {a }}$ | 8.7 | 8.9 | 7.4 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 26.4 | 29.2 | 23.4 |
| Binge drinking among adults | ... | 31.4 | 8.5 |
| Low physical activity in adults ${ }^{\text {b }}$ | 24.0 | 14.5 | 34.3 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 76.3 | 75.2 | 77.4 |
| Overweight among adults (BMI 25-29.9) | 24.9 | 20.9 | 29.2 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 | $\ldots$ | ... | ... |
| Adults with diabetes mellitus | 17.7 | 22.0 | 12.0 |
| Adults with raised BP and/or taking medication | 32.1 | 32.0 | 32.1 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> If the answer is yes, does it have: | Yes $^{\text {a }}$ |
| Budget? | No |
| Measurable outcomes? | Yes |
| Monitoring and evaluation component? | NE |
| Communications component? | Yes |
| Are there plans for specific diseases? | No |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

|  | Available? | $\begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array}$ |  |
| :--- | :--- | :--- | :--- |
| Limited |  |  |  |
| resources |  |  |  |$\}$

$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :---: |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | No | Not applicable |
| Radiotherapy | No | Not applicable |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass |  |  |
| Angioplasty |  |  |


|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :---: |
| Limited |  |  |
| resources |  |  |$|$

## NON COMMUNICABLE DISEASES MEDICINES

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


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

## NCDs IN DOMINICAN REPUBLIC

## Sociodemographic indicators



- Total population (thousands): 10,056.2
- Average annual deaths (thousands): $\mathbf{6 0 . 1}$
- Life expectancy at birth (years):

Total: $\mathbf{7 3 . 5}$ Male: $\mathbf{7 0 . 9}$ Female: $\mathbf{7 6 . 3}$

- Adult literacy rate (\%): $\mathbf{8 8 . 2}$
- Gross National Income US\$ per capita: 4,550.0
- \% of population covered by any type health insurance: $\mathbf{2 1 . 0}$


## Burden of disease

PREMATURE DEATHS (2004)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 5 . 2} \%$ of all deaths

## RISK FACTORS

| Prevalence (\%) of: | Total | Males | Females |
| :--- | :---: | :---: | :---: |
| Current adult tobacco smokers | $\ldots$. | 14.9 | 11.0 |
| Adolescent tobacco smokers | 14.9 | 18.4 | 11.9 |
| Fruit and vegetable intake in adults $^{\mathrm{a}}$ | 24.8 | 29.6 | 19.8 |
| Fruit and vegetable intake in adolescents $^{\mathrm{a}}$ | $\ldots$. | $\ldots$ | $\ldots$ |
| Binge drinking among adults | 9.9 | 15.2 | 4.4 |
| Low physical activity in adults $^{\mathrm{b}}$ | 35.7 | 31.5 | 40.0 |
| Low physical activity in adolescents $^{\mathrm{c}}$ | $\ldots$. | $\ldots$ | $\ldots$ |
| Overweight among adults (BMI 25-29.9) | 54.3 | 48.8 | 38.0 |
| Obesity among adults (BMI $\geq 30$ ) | 16.4 | 12.7 | 18.3 |
| Overweight among adolescents (BMI>+1SD) | $\ldots$. | $\ldots$ | $\ldots$ |
| Obesity among adolescents (BMI>+2SD) | $\ldots$. | $\ldots$ | $\ldots$ |
| Children <5 overweight | 8.3 | $\ldots$ | $\ldots$ |
| 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 <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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

## 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

|  | Available? |  | Free? |
| :--- | :--- | :--- | :--- |
| Call patients <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes |  |  |
| Tamoxifen | Yes | Not specified |  |
| Oral morphine | No | Not applicable |  |

## NCDs IN ECUADOR

## Sociodemographic indicators



- Total population (thousands): 14,757.3
- Average annual deaths (thousands): $\mathbf{7 4 . 5}$
- Life expectancy at birth (years):

Total: $\mathbf{7 5 . 7}$ Male: $\mathbf{7 2 . 8}$ Female: $\mathbf{7 8 . 7}$

- Adult literacy rate (\%): $\mathbf{8 4 . 2}$
- 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 24.3 | 23.3 | 25.3 |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 85.2 | 81.1 | 89.2 |
| Overweight among adults (BMI 25-29.9) | 56.0 | 51.8 | 60.2 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | ( |  |
| Aspirin | No | Not applicable |  |
| Metformin | Yes | 1 |  |
| Glibenclamide | Yes | 1 |  |
| Thiazide diuretics | Yes | ( |  |
| ACE inhibitors | Yes | (1) |  |


|  | Available? | All patients | Free? <br> Limited resources |
| :--- | :--- | :--- | :--- |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes | Yes |  |
| Tamoxifen | Yes |  |  |
| Oral morphine |  |  |  |

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.

## NCDs IN EL SALVADOR

## Sociodemographic indicators



- Total population (thousands): $\mathbf{6 , 2 2 7 . 5}$
- Average annual deaths (thousands): $\mathbf{4 1 . 0}$
- Life expectancy at birth (years):

Total: $\mathbf{7 2 . 3}$ Male: $\mathbf{6 7 . 4}$ Female: $\mathbf{7 6 . 9}$

- Adult literacy rate (\%): $\mathbf{8 4 . 1}$
- Gross National Income US\$ per capita: 3,370.0
- \% of population covered by any type health insurance: $\mathbf{2 0 . 5}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{1 8 . 1} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | 4.7 | 8.8 | 1.5 |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | ... | ... | ... |
| Overweight among adults (BMI 25-29.9) | 38.3 | 44.3 | 34.7 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

|  | Available? | $\begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array}$ |  |
| :--- | :--- | :--- | :--- |
| Limited |  |  |  |
| resources |  |  |  |$\}$

## SPECIALIZED CARE

$\left.\begin{array}{llr}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Lesited } \\ \text { resources }\end{array}\right\}$

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

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? |  | Fll patients |  | Limited resources |
| :--- | :---: | :--- | :--- | :---: | :---: |
|  |  |  |  |  |  |
| Insulin | Yes |  |  |  |  |
| Aspirin | Yes |  |  |  |  |
| Metformin | Yes |  |  |  |  |
| Glibenclamide | Yes |  |  |  |  |
| Thiazide diuretics | Yes | 0 |  |  |  |
| ACE inhibitors | Yes | 0 |  |  |  |

## 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

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| DIABETES MANAGEMENT |  |  |  |
| Eye exams | Yes |  | $\checkmark$ |
| Photocoagulation for retinopahty | Yes |  | $\square$ |
| Dialysis | Yes |  | $\downarrow$ |
| OTHER |  |  |  |
| Home care for patients with terminal or advanced disease | No | Notap | plicable |

## NCDs IN GRENADA

## Sociodemographic indicators



- Total population (thousands): $\mathbf{1 0 8 . 4}$
- Average annual deaths (thousands): $\mathbf{0 . 9}$
- Life expectancy at birth (years):

Total: $\mathbf{7 3 . 0}$ Male: $\mathbf{7 0 . 5}$ Female: $\mathbf{7 5 . 8}$

- 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)
12.7 \% Diabetes Mellitus


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 1 . 0} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 33.4 | 34.4 | 32.6 |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 84.8 | 81.9 | 86.9 |
| Overweight among adults (BMI 25-29.9) | ... | ... | ... |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | ... | ... | ... |
| Overweight among adolescents (BMI>+1SD) | ... | ... | ... |
| Obesity among adolescents (BMI>+2SD) | ... | ... | ... |
| Children $<5$ overweight | $\ldots$ | $\ldots$ | $\ldots$ |
| Adults with diabetes mellitus | ... | ... | ... |
| Adults with raised BP and/or taking medication | ... | ... | ... |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

## PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

|  |  | $\begin{array}{c}\text { Free? } \\ \text { All } \\ \text { Limited } \\ \text { patients }\end{array}$ |
| :--- | :--- | :---: |
| resources |  |  |$]$ Available?

## SPECIALIZED CARE

|  |  | Free? <br> Available? <br> All <br> patients |
| :--- | :--- | :---: |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes | Not specified |
| Colposcopy | Yes $^{\text {a }}$ | Not applicable |
| Diagnostic mammography | Yes |  |
| Chemotherapy | No | Not applicable |
| Radiotherapy |  |  |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass | No | Not applicable |
| Angioplasty |  |  |
| Notes: a: Available privately. |  |  |

## NON COMMUNICABLE DISEASES MEDICINES

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

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

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| DIABETES MANAGEMENT |  |  |  |
| Eye exams | Yes | ( |  |
| Photocoagulation for retinopahty | Yes | ( |  |
| Dialysis | Yes ${ }^{\text {a }}$ | Not ap | plicable |
| OTHER |  |  |  |
| Home care for patients with terminal or advanced disease | No | Not ap | icable |
| Notes: a: Available privately. |  |  |  |


|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Calcium channels blockers | Yes |  | Not free ${ }^{\text {a }}$ |
| Beta blockers | Yes |  | Not free ${ }^{\text {a }}$ |
| Statins | Yes | 2 |  |
| Tamoxifen | Yes ${ }^{\text {b }}$ |  | applicable |
| Oral morphine | Yes | $\cdots$ |  |

Notes: b: Available privately.
» Premature mortality: Regional Mortality Information System. Regional Health Observatory. PAHO/WHO, 2011.

## NCDs IN GUATEMALA

## Sociodemographic indicators



- Total population (thousands): 14,757.3
- Average annual deaths (thousands): $\mathbf{8 0 . 5}$
- Life expectancy at birth (years):

Total: $\mathbf{7 1 . 3}$ Male: $\mathbf{6 7 . 7}$ Female: $\mathbf{7 4 . 8}$

- Adult literacy rate (\%): $\mathbf{7 4 . 5}$
- Gross National Income US\$ per capita: 2,650.0
- \% of population covered by any type health insurance: $\mathbf{2 3 . 4}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{1 4 . 9} \%$ 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 ${ }^{\text {a }}$ | 19.0 | 20.4 | 18.1 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 26.7 | 26.6 | 26.7 |
| Binge drinking among adults | 6.9 | 13.1 | 1.2 |
| Low physical activity in adults ${ }^{\text {b }}$ | 50.4 | 56.0 | 45.0 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 75.9 | 71.4 | 80.8 |
| Overweight among adults (BMI 25-29.9) | 38.5 | 38.8 | 38.2 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

## PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

|  |  | $\begin{array}{c}\text { Free? } \\ \text { All } \\ \text { Limited }\end{array}$ |
| :--- | :--- | :---: |
| patients |  |  |
| resources |  |  |$]$

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :---: |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | Yes |  |
| Radiotherapy |  | Yes |
| CVD MANAGEMENT | Yes | 0 |
| Cardiac bypass |  |  |
| Angioplasty |  |  |


|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| DIABETES MANAGEMENT |  |  |  |
| Eye exams | Yes | 0 |  |
| Photocoagulation for retinopahty | Yes |  | ( |
| Dialysis | Yes |  | ( |
| OTHER |  |  |  |
| Home care for patients with terminal or advanced disease | No | Not ap | plicable |

## NON COMMUNICABLE DISEASES MEDICINES

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

## Sources:

"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

## NCDs IN GUYANA

## Sociodemographic indicators



- Total population (thousands): $\mathbf{7 5 6 . 0}$
- Average annual deaths (thousands): $\mathbf{4 . 4}$
- Life expectancy at birth (years):

Total: $\mathbf{7 0 . 0}$ Male: $\mathbf{6 6 . 9}$ Female: $\mathbf{7 3 . 1}$

- 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 $\mathbf{2 8 . 6} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 31.7 | 34.3 | 29.4 |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 78.7 | 76.2 | 80.9 |
| Overweight among adults (BMI 25-29.9) | 29.0 | 26.0 | 30.7 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> If the answer is yes, does it have: | Yes $^{\text {a }}$ |
| Budget? | Yes |
| Measurable outcomes? | NS |
| Monitoring and evaluation component? | NS |
| Communications component? | Yes |
| Are there plans for specific diseases? | Yes |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

SPECIALIZED CARE

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { All } \\ \text { patients } \end{gathered}$ | Limited resources |
| CANCER DIAGNOSIS AND TREATMENT |  |  |  |
| Colposcopy | Yes | 1 |  |
| Diagnostic mammography | Yes | ( |  |
| Chemotherapy | Yes | ( |  |
| Radiotherapy | Yes | $\downarrow$ |  |
| CVD MANAGEMENT |  |  |  |
| Cardiac bypass | Yes | Not | ecified |
| Angioplasty | Yes | Nots | ecified |

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline & & \\ \hline \text { DIABETES MANAGEMENT } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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

## 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

|  | Available? |  | Free? |
| :--- | :--- | :--- | :--- |
|  |  | All patients | Limited resources |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes | Yes | Not applicable |
| Tamoxifen | No |  |  |
| Oral morphine |  |  |  |

## Sociodemographic indicators



- Total population (thousands): 7,754.7.1
- Average annual deaths (thousands): $\mathbf{3 7 . 5}$
- Life expectancy at birth (years):

Total: $\mathbf{7 3 . 3}$ Male: $\mathbf{7 1 . 0}$ Female: $\mathbf{7 5 . 6}$

- Adult literacy rate (\%): $\mathbf{8 3 . 6}$
- 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 $\mathbf{6 9} \%$ of all deaths

* Estimates based on a combination of country life tables, cuase of death models, regional cause of death partterns, and WHO and UNAIDS program estimates


## 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 $^{\mathrm{a}}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Fruit and vegetable intake in adolescents $^{\mathrm{a}}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Binge drinking among adults $_{\text {Low physical activity in adults }}{ }^{\mathrm{b}}$ | 9.9 | 17.3 | 1.7 |
| Low physical activity in adolescents $^{\mathrm{c}}$ | $\ldots$. | $\ldots$ | $\ldots$ |
| Overweight among adults (BMI 25-29.9) | 34.9 | 36.6 | 33.2 |
| Obesity among adults (BMI $\geq 30$ ) | 19.3 | 15.5 | 24.5 |
| Overweight among adolescents (BMI>+1SD) | $\ldots$. | $\ldots$ | $\ldots$ |
| Obesity among adolescents (BMI>+2SD) | $\ldots$. | $\ldots$ | $\ldots$ |
| Children < $<$ … overweight | 5.8 | $\ldots$ | $\ldots$ |
| 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; $B P$ : Blood pressure.

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right]$

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | Yes |  |
| Radiotherapy |  |  |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass | No | Not applicable |
| Angioplasty |  |  |

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes |  | $\checkmark$ |
| Aspirin | Yes | ( |  |
| Metformin | Yes |  | ( |
| Glibenclamide | Yes | ( |  |
| Thiazide diuretics | Yes | ( |  |
| ACE inhibitors | Yes |  | 0 |

Sources:

## NCDs IN JAMAICA

## Sociodemographic indicators



- Total population (thousands): 2,751.3
- Average annual deaths (thousands):
19.9
- Life expectancy at birth (years):

Total: $\mathbf{7 3 . 2}$ Male: $\mathbf{7 0 . 7}$ Female: $\mathbf{7 5 . 8}$

- Adult literacy rate (\%): $\mathbf{8 6 . 4}$
- 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

* 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.

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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 28.2 | 29.6 | 26.8 |
| Binge drinking among adults | ... | 15.0 | 3.0 |
| Low physical activity in adults ${ }^{\text {b }}$ | 15.7 | 12.2 | 19.2 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 21.2 | 17.1 | 25.3 |
| Overweight among adults (BMI 25-29.9) | 26.4 | 25.8 | 27.0 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | ( |  |
| Aspirin | Yes | 1 |  |
| Metformin | Yes | ( |  |
| Glibenclamide | Yes | ( |  |
| Thiazide diuretics | Yes | ( |  |
| ACE inhibitors | Yes | ( |  |


|  | Available? | All patients | Free? <br> Limited resources |
| :--- | :--- | :--- | :--- |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes | Yes |  |
| Tamoxifen | Yes | Cral morphine |  |
| Oral |  |  |  |

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.


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

Total: $\mathbf{7 7 . 0}$ Male: $\mathbf{7 4 . 6}$ Female: $\mathbf{7 9 . 4}$

- 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 $\mathbf{2 2 . 8} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | ... | 5.7 | 2.9 |
| Low physical activity in adults ${ }^{\text {b }}$ | 37.7 | 37.1 | 38.4 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | ... | ... | ... |
| Overweight among adults (BMI 25-29.9) | ... | 42.7 | 37.4 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | ... | 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; $B P$ : Blood pressure. |  |  |  |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { CVD RISK ASSESSMENT } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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

$\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { All } \\ \text { patients? }\end{array} \\ \hline \text { DIABETES MANAGEMENT }\end{array}$ (imited $\left.\begin{array}{l}\text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |
| :--- | :---: | :--- |
|  | 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 |  | Not specified |


|  | Available? |  |
| :---: | :---: | :---: |
|  |  | 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 |

## 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).

# NCDs IN NICARAGUA 

## Sociodemographic indicators



- Total population (thousands): 5,869.9
- Average annual deaths (thousands): $\mathbf{2 7 . 5}$
- Life expectancy at birth (years):

Total: $\mathbf{7 4 . 1}$ Male: $\mathbf{7 1 . 1}$ Female: $\mathbf{7 7 . 2}$

- 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)
17.3 \% Diabetes Mellitus


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 1 . 9} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | 12.7 | 21.3 | 5.2 |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | ... | ... | ... |
| Overweight among adults (BMI 25-29.9) | 37.5 | 36.5 | 38.7 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 minutes; $c$ : physically active less than 60 min per day in $5-7$ of the | physi last 7 | ly active for <br> s; BP: Blood | $<600$ met pressure. |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Cenimited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | Yes |  |
| Radiotherapy |  |  |
| CVD MANAGEMENT |  | No response |
| Cardiac bypass | No | Not applicable |
| Angioplasty |  |  |


|  | Available? | Free? <br> All <br> patients | Limited <br> resources |
| :--- | :--- | :--- | :--- |
| DIABETES MANAGEMENT |  |  |  |

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | ( |  |
| Aspirin | Yes | 1 |  |
| Metformin | Yes | ( |  |
| Glibenclamide | Yes | ( |  |
| Thiazide diuretics | Yes | ( |  |
| ACE inhibitors | 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

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

## NCDs IN PANAMA

## Sociodemographic indicators



- Total population (thousands): 3,571.2
- Average annual deaths (thousands): $\mathbf{1 8 . 1}$
- Life expectancy at birth (years):

Total: 76.2 Male: $\mathbf{7 3 . 7}$ Female: $\mathbf{7 8 . 9}$

- 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 $\mathbf{1 8 . 9 \%}$ of all deaths

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | ... | ... | ... |
| Binge drinking among adults | ... | $\ldots$ | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | ... | ... | ... |
| Overweight among adults (BMI 25-29.9) | 23.2 | 19.7 | 25.1 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 3.0 | 2.0 | 4.1 |
| Overweight among adolescents (BMI>+1SD) | ... | ... | ... |
| Obesity among adolescents (BMI>+2SD) | ... | ... | ... |
| Children <5 overweight | 6.2 | ... | $\ldots$ |
| Adults with diabetes mellitus | 5.4 | 4.3 | 6.0 |
| Adults with raised BP and/or taking medication | 22.0 | 17.8 | 24.8 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

|  |  | $\begin{array}{c}\text { Free? } \\ \text { All } \\ \text { Limited }\end{array}$ |
| :--- | :--- | :---: |
| patients |  |  |
| resources |  |  |$]$

## SPECIALIZED CARE

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

|  | Available? | Free? <br> All <br> patients | Limited <br> resources |
| :--- | :--- | :--- | :--- |
| DIABETES MANAGEMENT |  |  |  |

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |
| :--- | :--- | :--- |
| All patients | Limited resources |  |
| Calcium channels <br> blockers | Yes |  |
| Beta blockers | Yes |  |
| 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

## Sociodemographic indicators



- Total population (thousands): 6,568.3
- Average annual deaths (thousands): $\mathbf{3 6 . 1}$
- Life expectancy at birth (years):

Total: $\mathbf{7 2 . 6}$ Male: $\mathbf{7 0 . 6}$ Female: $\mathbf{7 4 . 7}$

- Adult literacy rate (\%): $\mathbf{9 4 . 6}$
- 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 $\mathbf{2 5 . 6} \%$ of all deaths

RISK FACTORS

| Prevalence (\%) of ${ }^{\text {a }}$ : | 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 ${ }^{\text {b }}$ | 6.3 | 10.7 | 9.2 |
| Fruit and vegetable intake in adolescents ${ }^{\text {b }}$ | ... | ... | ... |
| Binge drinking among adults | 21.0 | 31.8 | 14.6 |
| Low physical activity in adults ${ }^{\text {c }}$ | 23.9 | 19.0 | 28.4 |
| Low physical activity in adolescents ${ }^{\text {d }}$ | 57.0 | ... | ... |
| Overweight among adults (BMI 25-29.9) | 39.8 | 41.0 | 38.8 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

## PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right]$

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | No | Not applicable |
| Radiotherapy |  |  |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass | No | Not applicable |
| Angioplasty |  |  |

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | ( |  |
| Aspirin | Yes | 1 |  |
| Metformin | Yes | 1 |  |
| Glibenclamide | Yes | ( |  |
| Thiazide diuretics | Yes | 1 |  |
| ACE inhibitors | Yes | ( |  |


|  | Available? |  | Free? <br> All patients |
| :--- | :--- | :--- | :--- |
| Limited resources |  |  |  |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes |  |  |
| Tamoxifen | No | Not specified |  |
| Oral morphine | No | 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./ 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: $\mathbf{7 4 . 1}$ Male: $\mathbf{7 1 . 5}$ Female: $\mathbf{7 6 . 7}$

- Adult literacy rate (\%): $\mathbf{8 9 . 6}$
- 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)

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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 9.8 | 9.3 | 10.2 |
| Binge drinking among adults | ... | 5.6 | 0.3 |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 75.5 | 73.0 | 77.8 |
| Overweight among adults (BMI 25-29.9) | 47.9 | 43.3 | 52.2 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{llr}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

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

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

SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | Yes |  |
| Radiotherapy |  |  |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass | No | Not applicable |
| Angioplasty |  |  |

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


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

## Sources:

" 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

# NCDs IN PUERTO RICO 

## Sociodemographic indicators

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

Total: $\mathbf{7 9 . 2}$ Male: $\mathbf{7 5 . 2}$ Female: $\mathbf{8 3 . 1}$

- Adult literacy rate (\%): $\mathbf{9 0 . 5}$
- Gross National Income US\$ per capita:
- \% of population covered by any type health insurance: 92.0


## Burden of disease

PREMATURE DEATHS (2007)
17.4 \% Diabetes Mellitus


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 0 . 3}$ \% 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 ${ }^{\text {a }}$ | 17.7 | 17.1 | 18.3 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 80.7 | 78.6 | 82.5 |
| Binge drinking among adults | 10.6 | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 79.2 | 73.5 | 84.5 |
| Overweight among adults (BMI 25-29.9) | 37.7 | 41.4 | 34.4 |
| Obesity among adults (BMI $\geq 30$ ) | 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 | $\cdots$ | ... | ... |
| Adults with diabetes mellitus | 12.9 | 12.5 | 13.2 |
| Adults with raised BP and/or taking medication | 34.0 | 33.2 | 34.6 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Lesources }\end{array}\right\}$

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

SPECIALIZED CARE

|  |  | Free? |  |
| :--- | :--- | :--- | :---: |
|  | Available? | $\begin{array}{c}\text { All } \\ \text { patients }\end{array}$ |  |
| Lesources |  |  |  |
| CANCER DIAGNOSIS AND |  |  |  |$)$


|  | Free? |  |
| :--- | :--- | :--- |
|  | Available? | $\begin{array}{c}\text { All } \\ \text { patients }\end{array}$ |
| DIABETES MANAGEMENT |  |  |
| resources |  |  |$\}$

## NON COMMUNICABLE DISEASES MEDICINES

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

$\left.\begin{array}{lll} & \text { Available? } & \text { Fll patients }\end{array} \begin{array}{l}\text { Free? } \\ \text { Limited resources }\end{array}\right]$

## 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

## NCDs IN SAINT KITTS AND NEVIS

## Sociodemographic indicators



- Total population (thousands): $\mathbf{5 0 . 3}$
- Average annual deaths (thousands): $\mathbf{0 . 4}$
- Life expectancy at birth (years):

Total: $\mathbf{7 4 . 6}$ Male: $\mathbf{7 2 . 3}$ Female: $\mathbf{7 7 . 0}$

- 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 $\mathbf{1 8 . 5} \%$ 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 ${ }^{\text {a }}$ | 2.7 | 2.4 | 3.0 |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 16.2 | 19.7 | 12.8 |
| Binge drinking among adults | ... | 27.1 | 20.1 |
| Low physical activity in adults ${ }^{\text {b }}$ | 38.3 | 28.3 | 48.5 |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 19.7 | 13.6 | 24.9 |
| Overweight among adults (BMI 25-29.9) | 33.5 | 36.2 | 30.6 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 45.0 | 37.9 | 52.5 |
| Overweight among adolescents (BMI>+1SD) | ... | ... | ... |
| Obesity among adolescents (BMI>+2SD) | ... | ... | ... |
| Children <5 overweight | $\ldots$ | ... | ... |
| Adults with diabetes mellitus | 7.6 | 4.8 | 10.4 |
| Adults with raised BP and/or taking medication | 35.0 | 38.2 | 31.9 |

## Country capacity

## POLICIES \& ACTION PLANS

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

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right]$

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | No | Not applicable |
| Chemotherapy | No | Not applicable |
| Radiotherapy | No | Not applicable |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass |  |  |
| Angioplasty |  |  |

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| CERVICAL CANCER |  |  |  |
| Cervical cytology or PAP | Yes | 1 |  |
| 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 | 1 |  |

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

## 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).

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Calcium channels blockers | Yes | $\checkmark$ |  |
| Beta blockers | Yes | 2 |  |
| Statins | Yes | ( |  |
| Tamoxifen | No | Not applicable |  |
| Oral morphine | No | Not applicable |  |

## NCDs IN SAINT LUCIA

## Sociodemographic indicators



- Total population (thousands): 161.6
- Average annual deaths (thousands): $\mathbf{1 . 1}$
- Life expectancy at birth (years):

Total: $\mathbf{7 6 . 8}$ Male: $\mathbf{7 4 . 2}$ Female: $\mathbf{7 9 . 7}$

- 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)

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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 25.4 | 25.2 | 25.6 |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 84.4 | 82.6 | 86.0 |
| Overweight among adults (BMI 25-29.9) | 54.2 | 44.1 | 63.6 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 22.3 | 11.9 | 31.9 |
| Overweight among adolescents (BMI>+1SD) | ... | ... | ... |
| Obesity among adolescents (BMI>+2SD) | $\ldots$ | ... | ... |
| Children <5 overweight | 4.3 | $\ldots$ | ... |
| Adults with diabetes mellitus | ... | ... | ... |
| Adults with raised BP and/or taking medication | 41.8 | 46.1 | 37.6 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{llll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| CERVICAL CANCER |  |  |
| Cervical cytology or PAP | Yes |  |
| HPV DNA testing | No | Not applicable |
| Visual inspection techniques <br> (VIA) | Yes |  |
| VIA \& cryotherapy in a single <br> visit | No | Not applicable |
| BREAST CANCER | Yes |  |
| Clinical examination | Yes |  |
| Mammography | Yes |  |
| COLORECTAL CANCER | Yes | ( |
| Fecal occult blood test |  |  |
| Digital exam |  |  |

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

## SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :---: |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | No | Not applicable |
| Radiotherapy | No | Not applicable |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass |  |  |
| Angioplasty |  |  |

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |
| :--- | :--- | :--- |
| All patients | Limited resources |  |
| Calcium channels <br> blockers | Yes |  |
| Beta blockers | Yes |  |
| 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 Anne Margaret Henry, Principal Nursing Officer, Ministry of

# NCDs IN SURINAME 

Sociodemographic indicators


- Total population (thousands): $\mathbf{5 2 9 . 4}$
- Average annual deaths (thousands): $\mathbf{3 . 8}$
- Life expectancy at birth (years):

Total: $\mathbf{7 0 . 7}$ Male: $\mathbf{6 7 . 5}$ Female: $\mathbf{7 4 . 0}$

- Adult literacy rate (\%): $\mathbf{9 4 . 6}$
- Gross National Income US\$ per capita: 4,760.0
- \% of population covered by any type health insurance: $\mathbf{3 4 . 7}$


## Burden of disease

PREMATURE DEATHS (2007)

RISK FACTORS

| Prevalence (\%) of: | Total | Males | Females |
| :--- | :---: | :---: | :---: |
| Current adult tobacco smokers | 27.0 | $\ldots$ | $\ldots$ |
| Adolescent tobacco smokers | 12.1 | 14.0 | 10.1 |
| Fruit and vegetable intake in adults ${ }^{\mathrm{a}}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Fruit and vegetable intake in adolescents ${ }^{\mathrm{a}}$ | 31.0 | 33.0 | 29.2 |
| Binge drinking among adults | $\ldots$ | 47.0 | 19.7 |
| Low physical activity in adults ${ }^{\text {b }}$ | $\ldots .$. | $\ldots$ | $\ldots$ |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 45.6 | 44.4 | 46.7 |
| Overweight among adults (BMI 25-29.9) | 58.4 | 51.7 | 64.8 |
| Obesity among adults (BMI $\geq 30$ ) | 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 | $\ldots$ | $\ldots$ | $\ldots$ |
| Adults with diabetes mellitus | 19.5 | $\ldots$ | $\ldots$ |
| 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 <br> minutes; : 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 <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Lesources }\end{array}\right\}$

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

SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |
| :--- | :--- | :--- |
| All patients | Limited resources |  |
| Calcium channels <br> blockers | Yes |  |
| Beta blockers | Yes |  |
| Statins | Yes |  |
| Tamoxifen | Yes |  |
| Oral morphine | Yes |  |

## NCDs IN SAINT VINCENT AND THE GRENADINES

Sociodemographic indicators


- Total population (thousands): $\mathbf{1 0 3 . 9}$
- Average annual deaths (thousands): $\mathbf{0 . 7}$
- Life expectancy at birth (years):

Total: $\mathbf{7 4 . 2}$ Male: $\mathbf{7 2 . 3}$ Female: $\mathbf{7 6 . 1}$

- 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 $\mathbf{2 8 . 7} \%$ 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 ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 38.3 | 38.9 | 38.0 |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 86.7 | 84.4 | 88.6 |
| Overweight among adults (BMI 25-29.9) | 57.8 | 51.8 | 63.7 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 | ... | ... | ... |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | No |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | N/A |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE

|  | Available? | Free? <br> All <br> patients | Limited <br> resources |
| :--- | :--- | :--- | :--- |
| CVD RISK ASSESSMENT |  |  |  |
| BMI | Yes |  |  |
| Blood pressure | Yes |  |  |
| Blood glucose | Yes |  |  |
| Blood lipids | Yes |  |  |
| Individual risk management <br> with a validated CV risk score | No | Notapplicable |  |
| DM AND CVD MANAGEMENT |  |  |  |
| Blood pressure monitoring | Yes | Yes |  |
| Blood glucose monitoring | Yes |  |  |
| Blood lipids monitoring | Yes |  |  |
| HbA1C | Yes | Yes |  |
| Diabetic foot examination | Yes |  |  |
| Electrocardiogram |  |  |  |

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Lesited } \\ \text { resources }\end{array}\right\}$

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

SPECIALIZED CARE

|  | Available? | Free? <br> All <br> patients |
| :--- | :--- | :--- |
| Limited <br> resources |  |  |
| CANCER DIAGNOSIS AND |  |  |
| TREATMENT | Yes |  |
| Colposcopy | Yes |  |
| Diagnostic mammography | Yes |  |
| Chemotherapy | No | Not applicable |
| Radiotherapy | No | Not applicable |
| CVD MANAGEMENT | No | Not applicable |
| Cardiac bypass |  |  |
| Angioplasty |  |  |


|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | 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? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | $\downarrow$ |  |
| Aspirin | Yes |  | 1 |
| Metformin | Yes |  | ( |
| Glibenclamide | Yes |  | 1 |
| Thiazide diuretics | Yes |  | 1 |
| ACE inhibitors | Yes |  | ( |


|  | Available? | Free? |
| :--- | :--- | :--- |
| All patients | Limited resources |  |
| Calcium channels <br> blockers | Yes |  |
| Beta blockers | Yes |  |
| Statins | Yes |  |
| Tamoxifen | Yes |  |
| Oral morphine | Yes |  |

## Sources:

" 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).

## NCDs IN TRINIDAD AND TOBAGO

## Sociodemographic indicators



- Total population (thousands): 1,346.4
- Average annual deaths (thousands): $\mathbf{1 1 . 0}$
- Life expectancy at birth (years):

Total: $\mathbf{7 0 . 2}$ Male: $\mathbf{6 6 . 7}$ Female: $\mathbf{7 3 . 6}$

- 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 $\mathbf{2 6 . 5} \%$ of all deaths

RISK FACTORS

| Prevalence (\%) of: | Total | Males | Females |
| :---: | :---: | :---: | :---: |
| Current adult tobacco smokers | $\ldots$ | 36.5 | 7.3 |
| Adolescent tobacco smokers | 9.3 | 9.7 | 8.7 |
| Fruit and vegetable intake in adults ${ }^{\text {a }}$ | ... | ... | ... |
| Fruit and vegetable intake in adolescents ${ }^{\text {a }}$ | 24.6 | 24.8 | 24.3 |
| Binge drinking among adults | ... | ... | ... |
| Low physical activity in adults ${ }^{\text {b }}$ | ... | ... | ... |
| Low physical activity in adolescents ${ }^{\text {c }}$ | 81.0 | 75.9 | 86.1 |
| Overweight among adults (BMI 25-29.9) | 64.7 | 59.7 | 69.6 |
| Obesity among adults ( $\mathrm{BMI} \geq 30$ ) | 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 |

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | Yes |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| Insulin | Yes | ( |  |
| Aspirin | Yes | 1 |  |
| Metformin | Yes | ( |  |
| Glibenclamide | Yes | ( |  |
| Thiazide diuretics | Yes | ( |  |
| ACE inhibitors | Yes | (1) |  |


|  | Available? | All patients | Free? <br> Limited resources |
| :--- | :--- | :--- | :--- |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes | Yes |  |
| Tamoxifen | Yes | Cral morphine |  |
| Oral |  |  |  |

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

## Sociodemographic indicators



- Total population (thousands): 3,380.0
- Average annual deaths (thousands): $\mathbf{3 1 . 3}$
- Life expectancy at birth (years):

Total: $\mathbf{7 7 . 1}$ Male: $\mathbf{7 3 . 5}$ Female: $\mathbf{8 0 . 5}$

- Adult literacy rate (\%): $\mathbf{9 8 . 3}$
- Gross National Income US\$ per capita: 9,010.0
- \% of population covered by any type health insurance: $\mathbf{8 7 . 5}$


## 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 $^{\mathrm{a}}$ | 15.1 | 14.9 | 15.1 |
| Fruit and vegetable intake in adolescents $^{\mathrm{a}}$ | 22.5 | 22.4 | 22.6 |
| Binge drinking among adults | $\ldots$. | 17.4 | 7.9 |
| Low physical activity in adults $^{\mathrm{b}}$ | 35.1 | 29.0 | 40.7 |
| Low physical activity in adolescents $^{\mathrm{c}}$ | 29.0 | 29.9 | 26.2 |
| Overweight among adults (BMI 25-29.9) | 36.7 | 40.7 | 32.5 |
| Obesity among adults (BMI $\geq 30$ ) | 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 | $\ldots$ | $\ldots$ |
| 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

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE
$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { patients }\end{array} \\ \text { Limited } \\ \text { resources }\end{array}\right\}$
$\left.\begin{array}{llc}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

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

## SPECIALIZED CARE

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

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ \hline \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |
| :--- | :--- | :--- |
| All patients | Limited resources |  |
| Calcium channels <br> blockers | Yes |  |
| Beta blockers | Yes |  |
| 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 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): $\mathbf{1 5 3 . 1}$
- Life expectancy at birth (years):

Total: $\mathbf{7 4 . 5}$ Male: $\mathbf{7 1 . 6}$ Female: $\mathbf{7 7 . 5}$

- Adult literacy rate (\%): 95.2
- Gross National Income US\$ per capita: 10,090.0
- \% of population covered by any type health insurance: $\mathbf{6 5 . 0}$


## Burden of disease

PREMATURE DEATHS (2007)


Premature deaths from NCDs (<70 yrs) account for $\mathbf{2 4 . 8} \%$ of all deaths

RISK FACTORS

| Prevalence (\%) of: | Total | Males | Females |
| :--- | :---: | :---: | :---: |
| Current adult tobacco smokers | 18.0 | 22.6 | 13.6 |
| Adolescent tobacco smokers | $\ldots$ | 18.7 | 13.0 |
| Fruit and vegetable intake in adults ${ }^{\mathrm{a}}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Fruit and vegetable intake in adolescents $^{\mathrm{a}}$ | 16.7 | 16.9 | 16.5 |
| Binge drinking among adults | $\ldots$. | $\ldots$ | $\ldots$ |
| Low physical activity in adults $^{\text {b }}$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Low physical activity in adolescents $^{\text {c }}$ | $\ldots$. | $\ldots$ | $\ldots$ |
| Overweight among adults (BMI 25-29.9) | 67.5 | 67.9 | 67.0 |
| Obesity among adults (BMI $\geq 30$ ) | 30.8 | 26.6 | 34.8 |
| Overweight among adolescents (BMI>+1SD) | $\ldots$. | $\ldots$ | $\ldots$ |
| Obesity among adolescents (BMI>+2SD) | $\ldots$. | $\ldots$ | $\ldots$ |
| Children <5 overweight | 6.1 | $\ldots$ | $\ldots$ |
| Adults with diabetes mellitus | $\ldots$ | $\ldots$ | $\ldots$ |
| 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; $B P$ : Blood pressure.

## Country capacity

## POLICIES \& ACTION PLANS

| Is there an integrated NCD policy? | Yes |
| :--- | :--- |
| Is there an operational multisectoral <br> mechanism to coordinate the NCD policies? | No |
| Is there an integrated NCD action plan? <br> 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 |

## SURVEILLANCE

| 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 |

## Country capacity

PREVENTIVE HEALTH SERVICES AT THE PRIMARY LEVEL OF CARE


## SPECIALIZED CARE

$\left.\begin{array}{lll}\hline & \text { Available? } & \begin{array}{c}\text { Free? } \\ \text { All } \\ \text { patients }\end{array} \\ & & \\ \text { Limited } \\ \text { resources }\end{array}\right\}$

## NON COMMUNICABLE DISEASES MEDICINES

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


|  | Available? | Free? |
| :--- | :--- | :--- |
| AllLimited <br> patients <br> resources |  |  |
| CERVICAL CANCER |  |  |
| Cervical cytology or PAP | Yes | Yes |

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

|  | Available? | Free? |  |
| :---: | :---: | :---: | :---: |
|  |  | All patients | Limited resources |
| DIABETES MANAGEMENT |  |  |  |
| Eye exams | Yes | 2 |  |
| Photocoagulation for retinopahty | Yes | (1) |  |
| Dialysis | Yes | 2 |  |
| OTHER |  |  |  |
| Home care for patients with terminal or advanced disease | Yes | $\checkmark$ |  |


|  | Available? |  | Free? |
| :--- | :--- | :--- | :--- |
| All patients | Limited resources |  |  |
| Calcium channels <br> blockers | Yes |  |  |
| Beta blockers | Yes |  |  |
| Statins | Yes |  |  |
| Tamoxifen | Yes |  |  |
| Oral morphine | Yes |  |  |

" Country capacity: 2012 Country Capacity Survey in preparation for the CARMEN meeting, completed by Tania Bernal Schmelzer, NCDs Director, Ministry of Health, Venezuela.

[^0]To find out more about NCDs in the Americas and PAHO's work, visit:
www.paho.org/ncds
http://twitter.com/ncds_paho
f. http://www.facebook.com/PAHONCDs


[^0]:    ,

