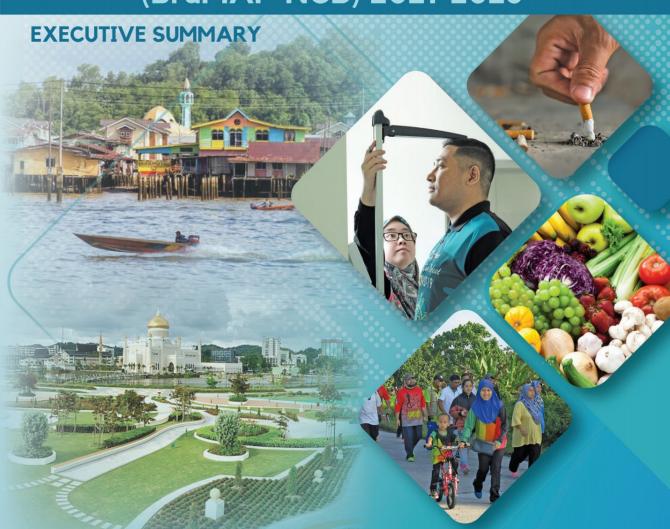




Brunei Darussalam Multisectoral Action Plan for the Prevention and Control of Noncommunicable Diseases

(BruMAP-NCD) 2021-2025



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His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah ibni Al-Marhum Sultan Haji Omar 'Ali Saifuddien Sa'adul Khairi Waddien, Sultan and Yang Di-Pertuan of Brunei Darussalam



Of His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah ibni Al-Marhum Sultan Haji Omar 'Ali Saifuddien Sa'adul Khairi Waddien, Sultan and Yang Di-Pertuan of Brunei Darussalam

"Health is the most important factor for all. If the body is healthy one can perform their work properly. On the other hand, if the body is not healthy, then any work that is being done will not be proper. This is the secret or the price of health."

- On the occasion of Hari Raya Aidilfitri 1437H, July 2016

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Brunei Darussalam Multisectoral
Action Plan for the Prevention and Control
of Noncommunicable Diseases
(BRUMAP-NCD) 2021-2025

Vision

Together Towards A Healthy Nation

Mission

To prioritise and improve prevention, early detection and management of noncommunicable diseases and their risk factors

Goal

To reduce the probability of dying between the ages of 30 and 69 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 10% by 2025.

Brunei's Vision 2035: High Quality of Life

Mission: To prioritise and improve prevention, early detection and management of NCDs and their risk factors

Goal: To reduce the probability of dying between the ages of 30 and 69 years from cardiovascular diseases, cancer, diabetes or chronic respiratory disease by 10% by 2025

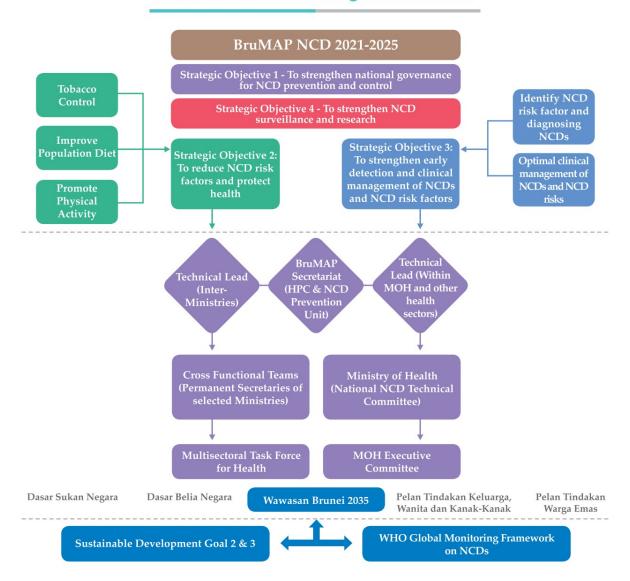
Strategic Objective 1: To strengthen national governance for NCD prevention and control

Strategic Objective 2: To reduce NCD risk factors and protect health

Strategic Objective 3: To strengthen early detection and clinical management of NCDs and NCD risk factors

Strategic Objective 4: To strengthen NCD surveillance and research

BruMAP-NCD 2021-2025 National Coordinating Mechanism



4 Strategic Objectives



Strategic Objective 1
To strengthen national
governance for NCD prevention
and control



Strategic Objective 2
To reduce NCD
risk factors and protect health



Strategic Objective 3

To strengthen early detection and clinical management of NCDs and NCD risk factors



Strategic Objective 4

To strengthen NCD surveillance and research



Strategic Objective 1: To strengthen national governance for NCD prevention and control

Strategic Objective 1: To strengthen national governance for NCD prevention and control

5 actions and 13 activities



Strengthen multisectoral leadership and coordination for NCD prevention and control

- Engage multisectoral non-health influencers and leaders to promote NCD prevention actions in various sectors
- Review resource requirements and utilisation for NCD prevention and control
- Increase investment and financial resources on NCD and risk factors prevention and control



Strengthen coordination mechanism for NCD prevention and control within the health sectors

- Formation of NCD Technical Committee to oversee NCD actions by the health sector
- Facilitate and ensure the availability and sustainability of budget and resources required for the successful implementation of NCD prevention and control programme

Strategic Objective 1: To strengthen national governance for NCD prevention and control

5 actions and 13 activities



Enhance leadership among non-health sectors in the implementation of NCD prevention and control activities

- Increase whole-of-government and public awareness on NCD burden, prevention and control
- Refine and review Multisectoral Task
 Force for Health's roles to explore
 collaboration with non-government
 agencies to identify and address
 underlying social determinants of
 health in alignment with progress
 towards SDGs



Enhance information technology effectiveness, security, functionality and coverage of health informatics platform, particularly Brunei Darussalam Health Information Management System (Bru-HIMS) and BruHealth

- Establish policy on data security, access, approval, utilisation and confidentiality on health-related data
- Expand Bru-HIMS and BruHealth to cover private hospitals, statutory body hospitals, private primary healthcare facilities and mobile outreach teams
- Enhance clinical decision support, analytics and connectivity with all relevant health databases and information systems (such as diseases and screening registries)
- Conduct regular training for users and staff on the use of information technology, to ensure doctors, nurses and data entry personnel have regular training and refresher course on data accuracy

Strategic Objective 1: To strengthen national governance for NCD prevention and control

5 actions and 13 activities



Optimise human resources utilisation and manpower planning on health

- Increase investment and financial resources on NCD and risk factors prevention and control
- Manage human resource effectively by identifying appropriate staff who can be trained, credentialed and empowered to conduct key tasks in NCD programme including scaling up of screening and identifying ways to reduce duplicated work, including through greater use of automation and clinical decision support within BruHIMS 2.0



14 actions and 27 activities

2.1 Tobacco Control





Heighten measures to minimise illicit tobacco trade

Strengthen the enforcement of smoke-free zones

- Establish national illicit trade committee and determine Key Performance Indicators
- Strengthen enforcement of illicit tobacco trade including Electronic Nicotine Delivery Systems (ENDS) or Electronic Non-Nicotine Delivery Systems (ENNDS) and emerging tobacco products
- Ratify the Protocol to Eliminate Illicit
 Trade in Tobacco Products

- Strengthen enforcement of noncompliance to smoke-free zones
- Strengthen disciplinary actions among civil servants who smoked at government premises by developing Standard Operating Procedures (within the existing legislations and relevant documents)

14 actions and 27 activities

2.1 Tobacco Control



Increase effectiveness of tobacco reduction in schools

 Review Standard Operating Procedures (SOPs) and guidelines for referrals of students who are smoking



Conduct mass media campaigns and education activities to prevent initiation of smoking and to encourage smokers to quit

- Engage marketing experts to design anti-tobacco campaigns directed at high-risk population groups, particularly adolescents
- Conduct media campaigns to educate and raise awareness on tobacco use among schoolchildren

14 actions and 27 activities

2.2 Improve population diets



Mandate the display of sugar, sodium and trans fatty acid content on food labels

 Modify food regulations so that both imported and locally-produced packaged foods display sugar, sodium and trans fatty acid in phases

Strengthen the effectiveness of policies targeting the formal and informal retail settings

- Strengthen the effectiveness of the Healthier Choice Initiative by:
 - i) Reviewing the Healthier Choice Criteria periodically
 - ii) Developing and enforcing strategies targeting consumers in the retail settings
 - iii) Strengthening socialisation of healthier choice programmes

14 actions and 27 activities

2.2 Improve population diets



Develop strategy to reduce salt intake

 Develop a National Salt Reduction Strategy and interventions leading to new or reformulated products with lower sodium content



Develop strategy to eliminate trans-fat in food products

 Develop National Trans Fat Elimination Strategy and interventions leading to new or reformulated products with no trans fat content

14 actions and 27 activities

2.2 Improve population diets



Develop, adopt and monitor fiscal strategies that reduce the consumption of foods high in sugar, sodium and trans fatty acids, and incentivise the consumption of fruit and vegetables

Improve affordability of healthy nutritious food and rebalance agriculture policies along the food chain supply to enhance nutrition-sensitive policies and reduce food losses

- Expand sugar-sweetened beverages tax to other 'foods of concern'
- Review any price protections on sugar



Regulate public food procurement and catering policies in public institutions

- Strengthen, implement and monitor healthy eating policies within educational settings
- Strengthen, implement and monitor healthy eating policies within health services and public service workplaces
- Promote healthy (compliant) menu options to food and beverage vendors operating in public service institutions
- Review the criteria underpinning the school breakfast programme to ensure healthier options which includes one piece of fruit and one serve of dairy without added sugar

14 actions and 27 activities

2.2 Improve population diets



Restrict the marketing of unhealthy food and beverages to children

 Regulate mandatory restrictions on all types of unhealthy food and beverages marketing visible to children (e.g. in print media, outdoor advertising, all types of advertisement in various educational and government institutions and grounds)

14 actions and 27 activities

2.3 Promote Physical Activity



Create opportunities for the integration of physical activity into the daily routines of Bruneians

- Adopt standards and safeguards that prioritise physical activity in:
 - Urban planning and building regulations and standards
 - Transport Master Planning
 - Roads infrastructure
- Trial and adopt programmes that incentivise the use of active transport to workplaces
- Encourage 10–20 minutes' mobility breaks daily for public service employees
- Integrate physical activity into daily school routines
- Trial the opening of school grounds and other government-owned venues in the evenings and on weekends for use by families and communities
- Continue to improve walking / cycling / hiking infrastructure in parks and natural environments



Continue to build public appetite for physical activity

- Develop marketing campaigns that promote physical activity and sports for all, as assets, especially for women and youths, and link physical activity to a range of health outcomes
- Develop marketing campaigns that promote opportunities for 'incidental/ incremental' physical activity



Strategic Objective 3:

To strengthen early detection and clinical management of NCDs and NCD risk factors

9 actions and 37 activities

3.1 Early detection and management of NCD and Risk Factors



Increase uptake of NCDs and risk factors screening among target groups, at clinical and community settings

- Increase public awareness on benefits of screening and early detection of NCDs and risk factors, through awareness campaign and innovative technology
- Address barriers that may hinder eligible and high-risk groups from participating in the screening programme
- Empower public with tools for selfscreening of NCD risk factors using BruHealth application
- Conduct regular educational sessions at highly populated areas such as places of worship including mosques and shopping malls
- Explore mobile screening team and bus for breast and cervical cancer and other NCD screening

- Engage role models or influencers to raise awareness on NCDs and risk factors and to promote National Health Screening Programme and healthy lifestyles
- Introduce Human Papillomavirus (HPV) DNA self-sampling tool as part of cervical cancer screening
- Streamline screening data collection from all healthcare facilities including private centres as currently National Health Screening Programme registry captures only those screened at Primary Healthcare
- Streamline recruitment and referral pathways for screening, including referral of cardiovascular disease (CVD) screening and risks from cancer screening pathways at Maternal and Child Health (MCH) and Early Detection and Cancer Prevention (EDCP) services

9 actions and 37 activities

3.1 Early detection and management of NCD and Risk Factors



Develop and implement an integrated screening pathway to allow public to be screened for multiple NCDs and risk factors in various facilities (community, workplaces, health facilities and through mobile platforms)

- Conduct stakeholder consultations on streamlining of technical protocols for an integrated multi-disease and multirisk factor screening pathway with multiple entry points
- Enhance community stakeholder's including non-governmental organisation, engagement to understand the constraints and opportunities in the implementation of community-based screening entry points
- Provide mobile screening teams with access to electronic health records (Bru-HIMS/BruHealth), blood sampling capability and other portable screening equipment as needed to conduct screening in the communities, and explore use of point-of-care tests (POCT) for screening of cardiovascular (CVD) risks and diabetes mellitus (DM)

9 actions and 37 activities

3.1 Early detection and management of NCD and Risk Factors



Explore coverage of NCD and NCD risk factor screening and management to foreign workers

- Conduct stakeholder consultations on leveraging existing health programme to cover NCD screenings and to develop NCD screening criteria and pathways for foreign workers
- Develop monitoring framework for screening of foreign workers for NCDs and risk factors
- Optimise of resource utilisation through collaboration with available private facilities and services



Develop quality assurance framework for NCD and risk factors screening programmes

- Review and adapt World Health
 Organisation (WHO)'s quality assurance
 framework into the existing screening
 programme, to strengthen call and
 recall system, including use of double
 reading for negative mammogram,
 double reading for negative Pap
 smear, and audit of waiting time for
 review or recall
- Conduct stakeholder consultations in the adoption of WHO's quality assurance framework among private healthcare providers

9 actions and 37 activities

3.2 Optimal Clinical Management of NCDs and NCD Risks



Strengthen integrated care services for NCDs through partnership with public and private healthcare providers in the primary, secondary and tertiary healthcare

- Develop a framework on integrated approach in managing NCDs and risk factors including a streamlined protocol or pathway for NCD early detection and management in both government and private sectors, focusing on primary healthcare in the community
- Review cardiovascular disease (CVD) risk scoring cut-off for intervention (drug therapy and/or lifestyle counselling) among Brunei population
- Develop and adopt a model of integrated diabetes care which can address fragmentation of diabetes care and integrate existing diabetes services in primary care and secondary care in a coordinated manner

- Consult and develop National Cancer Control Plan
- Enhance patient flow management and transition of care through integration and step-down facility towards community discharge planning
- Enhance continuous professional education and training of primary healthcare providers on early signs and symptoms of cancer and target time for referral

9 actions and 37 activities

3.2 Optimal Clinical Management of NCDs and NCD Risks



Review, update or develop screening and management guidelines and policies including Clinical Practice Guidelines (CPGs) and Standard Operating Procedures (SOPs) for key NCDs based on best practices and evidence-based recommendations

- Develop lipid guidelines to streamline clinical management of hyperlipidemia from primary to tertiary healthcare
- Enhance the prescription of nonpharmacological interventions in addressing NCDs and risk factors such as promotion of healthy lifestyle
- Incorporate pneumococcal and influenza vaccination into the National Immunisation Programme for children and adults and mandate high risk groups to have scheduled vaccinations (including consideration for influenza, pneumococcal and routine COVID-19 vaccination, if indicated) as part of their standards of care, e.g. as part of annual review for diabetes mellitus (DM) patients

9 actions and 37 activities

3.2 Optimal Clinical Management of NCDs and NCD Risks



Strengthen patient support system for optimisation of NCD management through multidisciplinary approach including rehabilitative, geriatrics, palliative and social care services

- Improve pain and symptom assessment and management for all patients in all healthcare settings and in the community, using an integrated approach across all disciplines
- Develop a policy on the use of opioid drugs for palliation in the community setting, e.g. Controlled Drug Use Policy which covers both healthcare and community settings
- Increase manpower and training to support palliative care and bereavement in healthcare and community settings, including, allied health professionals and other relevant professionals (such as religious officers)
- Incorporate palliative care education component in undergraduate and postgraduate training programmes, continuing medical education and competence-based training
- Enhance step-down care to allow appropriate treatment of patients at home, to reduce overburden in hospitals



Enhance training for healthcare workers in their relevant NCD specialties and empower their roles in managing patients with NCD and risk factors

- Upgrade and re-brand diabetic nurse educators, to cover all the major NCDs as 'NCD nurse specialists', including recruitment of more men to this role and more empowering uniforms
- Enhance counselling skills for healthcare professionals
- Develop generic health education and counselling materials using innovative technologies which can be easily accessible by the public

9 actions and 37 activities

3.2 Optimal Clinical Management of NCDs and NCD Risks



Strengthen the implementation of National Smoking Cessation Programme in various clinical departments and other agencies

- Mainstream smoking cessation into routine clinical practice of healthcare professionals, including paramedic staff, nurses and doctors
- Conduct regular invitations and education on smoking cessation for identified smokers including during triage, Bru-HIMS and/or via BruHealth application
- Enhance training and expertise in tackling addiction issues of smoking



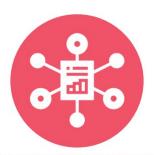
Strategic Objective 4:

To strengthen NCD surveillance and research

Strategic Objective 4: To strengthen NCD surveillance and research

4 actions and 15 activities

4.1 Surveillance



Develop new and strengthen existing key NCD registries, surveys and audits in order to provide timely and accurate data in alignment with WHO Global NCD Monitoring Framework

- Incorporate and automate NCDs and risk factors surveys into BruHealth/ Bru-HIMS portal; and implement surveys on NCDs and risk factors for adults and adolescents through enhanced use of BruHealth and Bru-HIMS database
- Enhance BruHealth platform to streamline data extraction from Bru-HIMS and clinical departments and strengthen Bru-HIMS user's inputs and data extraction from Bru-HIMS for easier reporting
- Strengthen departmental audit of NCD programme including screening and clinical management; and monitoring and evaluation on the effectiveness and efficient management of NCDs
- Explore collaborative opportunities with other agencies in monitoring and evaluation of NCDs and risk factors

Strategic Objective 4: To strengthen NCD surveillance and research

4 actions and 15 activities

4.1 Research



Identify priority research agenda for NCD prevention and control based on burden of risk factors, opportunities and impact

- Conduct research on factors affecting compliance to:
 - Smoking cessation services
 - Code of Conduct on Tobacco Industry Interference amongst government employees
- Identify key sources of dietary sugar, trans fatty acid and sodium among Bruneians
- Conduct literature review on:
 - Effective front-of-pack labelling systems
 - Effective retail interventions for healthier choices
 - Feasibility of subsidising and incentivising gym memberships and instructors

- Conduct focus group discussion on contribution of 'informal food' and dietary intake and seek opportunities to promote healthier consumption
- Conduct needs assessment on active transport in schools
- Conduct feasibility study on brain breaks in schools, e.g. private schools
- Establish age profiling and risk scoring calculators for cardiovascular disease (CVD), cancer and diabetes mellitus based on local population's disease burden
- Use artificial intelligence data mining for risk alerts and prompt interventions on patient health record platform

Strategic Objective 4: To strengthen NCD surveillance and research

4 actions and 15 activities

4.1 Research



Capacity building in research



Enhance translational research partnerships with local and overseas academic institutions and clinical departments

- Establish an agreed research agenda that informs and supports implementation and evaluation of BruMAP-NCD 2021–2025 with the support of WHO
- Enhance publication and dissemination of local research findings
- Build research capacity and expertise within healthcare services through information sharing and exchange of technical expertise with academic research institutions (local and overseas)

Overarching Target

Probability of premature NCD mortality

15.2% (in 2018) \rightarrow 13.7% (in 2025)

NCD
early detection
and
management
targets







NCD Prevention Targets

Adults: 19.9% → 14.0%

Adolescents:

9.2% → 6.4% (aged 13-15 years)

 $11.0\% \rightarrow 7.7\%$

(aged 13-17 years)

A 30% relative reduction in tobacco use among adults and adolescents (aged 13-17 years)

Adults:

 $10g/day \rightarrow 8.5g/day$

A 15% relative reduction in salt / sodium intake

Adults:

25.3% → 22.8%

Adolescents:

88.5% → 79.7%

A 10% relative reduction in the prevalence of physical inactivity among adults and adolescent

Adolescents:

39.8% → 25.9%

A 35% relative reduction in sweetened beverage consumption among adolescent schoolchildren (aged 13-17 years)

National policies establish

Establish national policies that limit saturated fatty acids and virtually eliminate industrially produced trans fatty acids in the food supply

Adults:

28.2% → 28.2%

Adolescents:

 $18.1\% \rightarrow 18.1\%$

No increase in the rate of obesity

10% increase

A 10% increase in the number of public education and health awareness campaigns and activities on smoking cessation, healthy eating and physical activity

HYPERTENSION

Adults:

76.2% → **84.0%**

A 10% increase in measured / screened for raised blood pressure among adult

Adults:

 $72.0\% \rightarrow 90.0\%$

A 25% increase blood pressure within the normal range among adult

Adults:

27.1% → 40.7%

A 50% increase in adults known to have hypertension whose blood pressure is under control

*those on antihypertensive whose systolic blood pressure below 140mmHg and diastolic blood pressure below 90mmHg

DIABETES MELLITUS

Adults:

57.0% → 68.0%

A 20% increase in measured / screened for raised blood glucose among adult

Adults:

 $9.7\% \rightarrow 10.0\%$

No increase in adults with raised blood glucose OR medication for raised blood glucose

Adults:

44.1% → 49.0%

A 10% increase among adults known to have diabetes mellitus whose blood glucose is under control

CHOLESTEROL

Adults:

78.0% → 86.0%

A 10% increase in measured / screened for cholesterol among adults

CHRONIC RESPIRATORY DISEASE

Adults:

32 per 100,000 population → 10.0% reduction

Age-adjusted chronic respiratory disease deaths per 100,000 population

CARDIOVASCULAR DISEASE

Adults:

72.6% → 80.0%

A 10% increase among adults aged 40-69 years who have an electronically documented overall cardiovascular risk score which includes fasting blood glucose and cholesterol

161.8 per 100,000 (in 2018) → 10% reduction (in 2025)

Age-adjusted cardiovascular (including stroke) deaths per 100,000 population

CANCER

Adults (Women):

15.9% → 24.0%

A 50% increase among women age 40-69 years who have been screened for breast cancer using mammography in the last 3 years

Adults:

29.9% → 45.0%

A 50% increase among men and women aged 50-75 who have been screened for colorectal cancer using Faecal Immunochemical Tests (FIT) in the last 2 years

102.8 per 100,000 (in 2018) \rightarrow 10% reduction (in 2025)

Age-adjusted cancer deaths per 100,000 population

10% increase

A 10% increase in the number of public education and health awareness campaigns and activities on cancer and risk factors

Adults:

47.5% → 57.0%

A 20% increase among adults with a 10year cardiovascular risk score above 10% who have been given drug therapy and / or lifestyle counselling

10% increase

A 10% increase in the number of public education and health awareness campaigns and activities on CVDs and risk factors

Adults (Women):

62.0% → 31.0%

A 50% relative reduction of late stage breast cancer at time of diagnosis

Adults:

72.0% → 36.0%

A 50% relative reduction of late stage colorectal cancer at time of diagnosis

Adults:

94% (vaccinated) → 95%

42% (screened) \rightarrow 60%

91% (treated) \rightarrow 95%

WHO Global Targets in the Elimination of Cervical Cancer as Global Public Health problem to achieve 90-70-90 by 2030 on vaccination, screening and treatment coverage

Acknowledgement

- World Health Organization (WHO)
- Legislative Council (Majlis Mesyuarat Negara)
- Prime Minister's Office
- Ministry of Finance and Economy
- Ministry of Foreign Affairs
- Ministry of Education
- Ministry of Primary Resources and Tourism
- Ministry of Development
- · Ministry of Culture, Youth and Sports
- · Ministry of Religious Affairs
- Ministry of Home Affairs
- Ministry of Transport and Infocommunications
- Ministry of Defence
- Universiti Brunei Darussalam
- Universiti Teknologi Brunei
- Darussalam Enterprise (DARe)
- Brunei Darussalam Food Authority (BDFA)
- Brunei Youth Council (Majlis Belia Brunei)
- Centre for Strategic and Policy Studies (CSPS)
- Brunei Insurance and Takaful Association (BITA)
- Ministry of Health



"Together Towards a Healthy Nation"



