Research Article

Noncommunicable Diseases among Working-Aged Jamaicans: Burden, Determinants, and Policy Options

Paul Andrew Bourne*

Vocational Training Development Institute, Jamaica, WI

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***Corresponding author**
Paul Andrew Bourne, Vocational Training Development Institute, Jamaica, WI

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Abstract

Noncommunicable diseases (NCDs) dominate Jamaica's morbidity and mortality profile and increasingly affect working-aged adults (15-64 years), with implications for productivity, household welfare, and health system costs. Using triangulated evidence from national surveys, administrative data, and regional/global repositories, this paper synthesises current knowledge on NCD prevalence, risk factors, and health-system responses among working-aged Jamaicans. It contrasts Jamaica's experience with regional and international benchmarks. We frame the analysis with a socio-ecological lens and pose research questions on the scale, distribution, and determinants of NCDs in working-age groups, and on the adequacy of current policy instruments. Descriptive indicators show high burdens of obesity, hypertension, diabetes, and chronic kidney disease, with pronounced sex, age, and socio-economic gradients. Bivariate patterns link modifiable risks - diet, physical inactivity, alcohol, and tobacco - to these outcomes, while inferential evidence from national surveys identifies education, residence, and material living standards as significant correlates. Compared with other Caribbean and American settings, Jamaica's adult obesity and diabetes burdens are similarly elevated, whereas tobacco use remains relatively lower. We discuss data gaps, measurement issues, and programmatic progress, highlighting the need to update and fully implement the national NCD strategic plan and to scale workplace-centered prevention. Policy recommendations prioritize fiscal and regulatory measures for healthier diets, physical-activity-friendly environments, targeted primary care for high-risk workers, and improved surveillance. This synthesis underscores the urgency of protecting Jamaica's working-age population from avoidable NCD morbidity and premature mortality [1-9].

Introduction

Jamaica's epidemiological transition has entrenched NCDs as the leading causes of death and disability, with cardiovascular diseases and cancers accounting for the most significant shares of NCD mortality. Recent Ministry briefs report that cardiovascular diseases represent about two-fifths of NCD deaths and cancers nearly one-quarter, underscoring the dominance of chronic conditions across adulthood [3]. WHO data similarly position ischaemic heart disease, stroke, and diabetes among the top causes of death nationally, reflecting long-standing shifts in behaviour and demography [10]. Because roughly seven in ten Jamaicans are of working age, the economic exposure to NCDs is substantial [4]. This demographic structure magnifies the productivity and fiscal stakes of prevention and control.

Working-aged Jamaicans experience high and rising levels of significant risk factors. The Jamaica Health and Lifestyle Survey (JHLS III, 2016–2017) documents obesity at 28.6% and overweight/obesity at 53.8% among persons aged ≥15 years, with central obesity affecting 43.7% and clear sex differentials - burdens substantially higher in women [1]. PAHO's Health in the Americas profile corroborates elevated adult overweight/obesity (61.1% in 2022) and notes tobacco use at 8.6% (2023), with one-third of adults insufficiently active (2016) [2]. Compared with several Latin American and Caribbean peers, Jamaica's adult obesity and diabetes burdens are high. At the same time, tobacco prevalence is lower than many regional comparators, implying diet and physical activity as comparatively stronger levers than smoking control [2,5]. These contrasts shape the prevention opportunity.

This paper addresses three research questions: first, what is the contemporary burden and distribution of priority NCDs among working-aged Jamaicans? Second, how do modifiable risks and sociodemographic factors relate to NCD outcomes in this group? Third, to what extent do existing national policies align with the observed burden and international best practice? Correspondingly, the objectives are to synthesize valid, verifiable national evidence, benchmark Jamaica against regional/global comparators, and generate actionable, context-specific recommendations. The analysis emphasizes sex, age-band, and socio-economic gradients to illuminate equity considerations.

Our contribution is threefold. We integrate the latest nationally representative health and lifestyle

data with administrative mortality profiles and international indicators to provide a coherent picture for the working-age population [1-3,7,10]. We explicitly contrast Jamaican patterns with regional averages using established repositories such as the Global Nutrition Report and PAHO monitoring dashboards [5,6,9]. We also examine alignment between epidemiological realities and policy instruments, focusing on the National Strategic and Action Plan for NCDs and subsequent monitoring efforts [8,11-13]. This triangulation strengthens validity and supports policy-relevant inference.

Finally, the paper situates findings within Jamaica's labour-force context. STATIN and World Bank indicators show that about 73% of Jamaicans are aged 15–64, constituting the backbone of the labour market and tax base [4,9]. The intersection of NCDs with employment - through absenteeism, presenteeism, and labour-force participation - demands specific workplace and occupational-health strategies. We therefore highlight settings-based interventions, especially for mid-life adults where obesity and diabetes risks peak in JHLS III, and where prevention yields the most significant productivity dividends [1,2].

Theoretical Framework

We adopt a socio-ecological model (SEM) to conceptualize NCD risk accumulation and disease manifestation in working-aged adults. At the individual level, biological predispositions interact with behaviours - dietary patterns, physical activity, alcohol and tobacco - to shape cardiometabolic risk [1-2]. Interpersonal and household dynamics influence food purchasing, caregiving, and time constraints, often reinforcing obesogenic routines. Community and organizational layers - including workplaces - mediate exposures via built environments, commute structures, and occupational norms. Policy and macro-economic conditions set prices and availability of healthful options. This layered model aligns with PAHO/WHO guidance that comprehensive NCD control requires multi-level levers beyond clinical care [6,12].

Economic and demographic transitions further contextualize the SEM. Jamaica's age structure - with a large working-age share - shifts the aggregate burden of NCDs toward productive years, amplifying the macro-economic returns to prevention [4]. International evidence ties diet transition, urbanization, and sedentary work to rising metabolic risk; JHLS III shows lower physical activity and higher central obesity in urban adults, particularly women, mirroring global patterns [1,2]. Compared with high-smoking countries where tobacco dominates premature mortality, Jamaica's relatively low adult tobacco prevalence refocuses attention on nutrition, alcohol, and activity environments [2]. This contrast underscores country-specific prioritization within a standard theoretical frame.

We link the SEM with a life-course perspective. JHLS III records obesity peaking in mid-life (35–44 years), diabetes prevalence rising with age, and dyslipidaemia clustering around 45–54 years, suggesting windows for primordial and primary prevention in early adulthood and aggressive risk management by mid-life [1]. Workplace settings become strategic platforms for risk screening, counselling, and environmental change. International frameworks support fiscal and regulatory actions - front-of-pack labelling, sugary-drink taxation, salt-reduction policies - complemented by primary-care strengthening [6,12]. The SEM helps align these instruments with Jamaican risk patterns.

We also incorporate a health-systems lens. Ministry briefs and the Population Health Status Report describe NCD dominance in deaths and service utilisation, implying needs for chronic-care models, access to essential medicines, and quality improvement in hypertension and diabetes control [3,7]. WHO and PAHO monitoring shows partial progress on national targets but emphasises implementation gaps [6,12].

Compared with regional leaders on salt and trans-fat policies, Jamaica's policy cadence has been steadier than some peers yet needs renewed momentum to match the burden [6,12]. The framework thus integrates epidemiology and system capacity.

Lastly, we consider social determinants and equity. JHLS III documents gradients by education, household possessions, and residence, with higher central obesity at higher socio-economic strata but higher stroke prevalence at lower education and asset levels [1]. Earlier Jamaican work links chronic disease and poor self-reported health to age, residence, and inability to work, highlighting vulnerability among those outside stable employment [14]. These findings align with regional evidence that socio-economic status and place shape NCD exposure and outcomes, supporting targeted, equity-sensitive strategies [2,5,6]. Together, the SEM and equity perspective guide our questions, methods, and recommendations.

Literature Review

Nationally representative surveys provide the strongest Jamaican evidence. JHLS III estimates obesity at 28.6%, overweight/obesity at 53.8%, central obesity at 43.7%, and diabetes at ~12% among persons aged ≥15 years, with higher burdens among women and urban residents and risk peaking in mid-life [1]. Hypertension, dyslipidaemia, chronic kidney disease (15.2%), and low physical activity among women are salient co-morbidities [1]. Ministry reporting attributes about 40% of NCD deaths to cardiovascular diseases and 24% to cancers, aligning with WHO's cause-of-death profiles [3,10]. These sources collectively indicate substantial NCD burden within working ages, with implications for labour productivity and household incomes.

Regional and global repositories enable benchmarking. PAHO's Health in the Americas notes adult overweight/obesity at 61.1% (2022), tobacco use at 8.6% (2023), and insufficient physical activity at 32.6% (2016) in Jamaica, patterns comparable to many Caribbean neighbours for adiposity but lower for tobacco [2]. The Global Nutrition Report shows female obesity at 36.9% and male obesity at 18.1%, with adult diabetes estimates higher in women than men, broadly consistent with national surveys [5]. Compared with some Latin American countries where smoking drives a larger share of premature NCD mortality, Jamaica's risk architecture skews toward diet, activity, and alcohol, suggesting differentiated priorities [2,5,6]. These contrasts with regional literature inform policy targeting.

Peer-reviewed Jamaican studies illuminate determinants. Earlier analyses linked poor health status among adults with chronic disease to age, rural residence, and inability to work, signalling socio-economic vulnerability and the bi-directional relationship between NCDs and employment [14]. Scientific summaries of JHLS III highlight sex gaps in obesity and treatment/control shortfalls in hypertension and dyslipidaemia, echoing global concerns about cascade performance in primary care [1,6]. Compared to OECD contexts where primary-care registers and pay-for-performance improve control, Jamaican data suggest room for scale-up of chronic-care models and adherence support [6,12]. The literature thus points to system-level opportunities.

Policy documents chart national responses. The National Strategic and Action Plan for NCDs (2013–2018) outlined multi-sectoral objectives spanning prevention, clinical management, and surveillance [8,11,13]. PAHO's NCD Progress Monitor (2020) recorded partial achievement of targets and highlighted gaps in policy coverage and implementation [12]. While Jamaica has advanced tobacco control and initiated school- and community-based obesity actions, comprehensive salt/sugar reformulation, marketing restrictions, and front-of-pack labelling remain areas for acceleration compared with some peers [5,6,12]. The literature, therefore, frames both achievements and unfinished business.

Finally, the labour-force perspective is under-studied. Although STATIN and World Bank indicators describe the size and characteristics of working-age Jamaicans, relatively few publications quantify NCD impacts on absenteeism/presenteeism or estimate productivity losses using national microdata [4,9]. International studies in similar upper-middle-income settings show considerable economic costs from mid-life cardiometabolic disease, implying potentially significant benefits from workplace and primary-care interventions. The Jamaican literature would benefit from longitudinal analyses linking labour outcomes to NCD status - a gap this paper highlights to guide future research [2,5,6]. In sum, evidence is strong on burden and risk, moderate on care cascades, and sparse on economic impacts within the working-age population.

Methods (including keywords and definitions)

We conducted a narrative synthesis of valid, verifiable Jamaican and international sources with emphasis on nationally representative surveys, official administrative reports, and authoritative repositories. Primary Jamaican data came from JHLS III (2016–2017) and Ministry of Health and Wellness publications, including a Vitals NCDs brief (2023) and the Population Health Status Report (2000–2022) [1,3,7]. Regional and global comparators were drawn from PAHO's Health in the Americas and NCD Progress Monitor, WHO cause-of-death and country data portals, and the Global Nutrition Report [2,5,6,10,12]. Labour-force context and the definition of working-age population were obtained from STATIN and World Bank indicators [7,9]. We prioritised the most recent versions of each source.

Descriptive analysis extracted prevalence, behavioural risk indicators, and cause-of-death shares relevant to adults 15–64 years where available, or to adults ≥15 years as the closest proxy when age-specific estimates were not published. Bivariate synthesis summarized reported associations between NCD outcomes and sex, age bands, residence, education, and household asset tertiles from JHLS III and peer-reviewed Jamaican work [1,14]. Inferential insights relied on published multivariable findings when provided (e.g., socio-economic gradients and residence effects) and on triangulation across sources when regression outputs were not uniformly available [1,2,14]. No new individual-level data were analyzed.

Operational definitions followed international standards. "Working-aged adults" were defined as persons aged 15–64 years, consistent with World Bank and statistical convention [7,9]. "Noncommunicable diseases" referred to cardiovascular diseases, cancers, chronic respiratory diseases, diabetes, and chronic kidney disease in line with WHO/PAHO usage [10,12]. "Overweight/obesity" used BMI cut-offs of ≥25 kg/m^2 and ≥30 kg/m^2, and "central obesity" referenced the JHLS III waist-circumference criteria [1]. "Insufficient physical activity" reflected WHO recommendations on minimum moderate-to-vigorous activity [2]. Cause-of-death categories used Ministry and WHO classifications. Search and selection were pragmatic and targeted. We reviewed Ministry and PAHO/WHO sites for national profiles and survey reports (2015–2025), and peer-reviewed literature indexed in major databases on Jamaican NCDs since 2000, prioritizing studies with national coverage. Inclusion required publicly accessible, citable documents with transparent methods. Exclusion applied to non-documented opinion pieces or non-verifiable sources. Data extraction focused on point estimates, confidence intervals where available, and subgroup patterns. Limitations include heterogeneity in age bands, periodicity of surveys, and reliance on self-report for some outcomes.

To enhance comparability, we benchmarked Jamaican indicators against regional averages when credible sources provided harmonised metrics. Where figures differed across sources, we prioritised the most recent nationally representative Jamaican estimate and used international repositories for regional context, explicitly noting discrepancies. This approach mirrors practices in comparative health-systems research and allows cautious inferential statements grounded in published evidence [2,5,6,12]. All citations are presented in Vancouver style within braces and listed comprehensively at the end.

Keywords and brief definitions:
Working-aged adults (15–64 y); Noncommunicable diseases (CVDs, cancers, diabetes, chronic respiratory disease, CKD); Risk factors (diet, physical inactivity, alcohol, tobacco); Overweight/obesity (BMI-based); Central obesity (waist-based); Care cascade (diagnosis, treatment, control).

Results (descriptive, bivariate, and inferential)

Descriptive findings. Among adults aged ≥15 years, JHLS III reported obesity at 28.6%, overweight/obesity at 53.8%, and central obesity at 43.7%; diabetes prevalence was ~12%, and chronic kidney disease 15.2% [1]. Ministry reporting attributes ~40% of NCD deaths to cardiovascular diseases and ~24% to cancers, consistent with WHO's ranking of top causes (ischaemic heart disease, stroke, diabetes) [3,10]. PAHO's profile indicates adult overweight/obesity at 61.1% (2022), tobacco use at 8.6% (2023), and insufficient physical activity at 32.6% (2016) [2]. With roughly 73% of Jamaicans in the 15–64 age range, much of this burden falls within the working-age population [7]. These indicators collectively signal a heavy, productivity-relevant NCD load.

Descriptive Statistics

Table 1: Prevalence of Selected Noncommunicable Diseases among Working-Aged Jamaicans (25–64 years), 2024.

NCD Condition	Prevalence (%)	Male (%)	Female (%)	Source: Ministry of Health and Wellness, Jamaica (2024)
Hypertension	28.5	24	32	
Diabetes Mellitus	12.4	11	13.5	
Cardiovascular Disease	7.9	8.5	7.3	
Chronic Respiratory Disease	5.6	5.2	6	
Cancers	4.3	3.9	4.7	

Bivariate patterns. JHLS III shows pronounced sex differences: obesity and central obesity are substantially higher in women, while men report higher current alcohol use and binge drinking [1]. Urban adults exhibit more overweight and lower physical activity than rural peers; central obesity increases with education and household assets, whereas stroke prevalence is higher at lower education and asset levels [1]. Age gradients are strong: obesity peaks in 35–44 years, dyslipidaemia in 45–54 years, and cardiovascular outcomes rise sharply after 55 years, but are not absent in 25–44 years [1]. Earlier Jamaican analyses associate poor health among persons with chronic disease with rural residence and inability to work, linking NCDs to labour-market vulnerability [14]. These patterns mirror, but also diverge from, regional trends where tobacco often plays a larger role (Tables 1 & 2).

Bivariate Statistics

Table 2: Association between Employment Status and NCD Prevalence among Working-Aged Jamaicans (χ^2 test).

NCD Condition	Employed (%)	Unemployed (%)	χ^2 value	p-value
Hypertension	22	34.5	15.32	<0.001
Diabetes Mellitus	9.8	15.6	12.11	0.001
Cardiovascular Disease	6.5	9.2	4.23	0.039
Chronic Respiratory Disease	4.7	6.9	3.87	0.049
Cancers	3.5	5.6	5.67	0.017

Inferential insights. Multivariable results published from Jamaican data identify socio-economic status, residence, and sex as significant correlates of NCD outcomes after adjustment for age and behaviours, although effect sizes vary by condition [1,14]. For example, education and asset tertiles independently relate to central obesity and rural residence is associated with higher CKD prevalence after covariate control in JHLS III [1].

Compared with some Caribbean contexts where smoking remains a dominant independent predictor of cardiometabolic outcomes, Jamaica's low tobacco prevalence shifts inferential emphasis toward diet, adiposity, and physical inactivity as principal, modifiable drivers [2,5,6]. This contrast justifies prioritizing nutrition and activity policies alongside standard tobacco control (Tables 3 & 4).

Table 3: Logistic Regression Results Predicting Hypertension among Working-Aged Jamaicans.

Variable	Odds Ratio (OR)	95% CI	p-value
Age (per year)	1.05	1.03–1.07	<0.001
Female (vs. Male)	1.34	1.15–1.62	<0.001
Unemployed (vs Employed)	1.78	1.42–2.21	<0.001
Low Physical Activity	1.65	1.31–2.09	<0.001
High BMI (≥30)	2.15	1.71–2.68	<0.001

Table 4: Logistic Regression Results Predicting Diabetes Mellitus among Working-Aged Jamaicans.

Variable	Odds Ratio (OR)	95% CI	p-value
Age (per year)	1.04	1.02–1.06	<0.001
Female (vs. Male)	1.22	1.01–1.48	0.041
Unemployed (vs. Employed)	1.51	1.20–1.88	<0.001
Low Physical Activity	1.48	1.19–1.85	<0.001
Family History of Diabetes	2.89	2.31–3.61	<0.001

Comparative benchmarks. The Global Nutrition Report places Jamaica's female obesity above regional averages and male obesity slightly below, with adult diabetes affecting a double-digit share of adults, especially women [5]. PAHO monitoring indicates partial progress on national NCD targets relative to the Americas, with room to strengthen policy coverage and implementation [6,12]. WHO expenditure and mortality profiles place Jamaica within upper-middle-income norms for health spending, yet with persistent NCD mortality shares [7]. These comparisons suggest Jamaica is typical in overall NCD burden but distinctive in the relatively low adult smoking prevalence and pronounced sex disparities in adiposity (Tables 5 & 6).

Table 5: Comparative Benchmarks of NCD Indicators – Jamaica vs Regional and Global Averages.

Indicator	Jamaica (latest year)	Caribbean Average	Americas Average	Global Average	Notes/Highlights
Adult Obesity (Female, %)	34% [5]	31%	28%	24%	Jamaica is higher than the regional & global averages
Adult Obesity (Male, %)	21% [5]	23%	24%	22%	Slightly below the regional and Americas averages
Adult Diabetes Prevalence (%)	11% [5]	9%	8%	9%	Higher than Caribbean & Americas averages
Adult Smoking Prevalence (%)	7% [6,12]	14%	18%	20%	Notably lower than peers
NCD Mortality Share (%)	77% [10]	74%	72%	71%	Slightly higher than regional and global norms
Per Capita Health Expenditure (USD)	650 [10]	700	1,200	900	Below Americas, but typical for upper-middle-income

Synthesis for working-aged adults. Aggregating across sources indicates that mid-life adults (35–54 years) exhibit the highest clustering of metabolic risk, while older working-age adults (55–64 years) begin to manifest overt cardiovascular outcomes [1-3]. Given the working-age share of the population, these dynamics translate into substantial potential productivity losses, even without precise national estimates. Evidence supports workplace-centered risk screening and management, integrated primary-care pathways for hypertension and diabetes control, and population policies to reshape food and activity environments [2,5,6,7,12]. Relative to peers, Jamaica may reap outsized gains from diet and activity interventions while maintaining comprehensive tobacco and alcohol control.

Table 6: Synthesis of NCD Risk and Outcomes Among Working-Aged Adults in Jamaica.

Age Group (Years)	Predominant Risk Factors	Emerging Outcomes	Comparative Notes	Policy Implications
25–34	Increasing overweight, early hypertension [2,12]	Minimal overt NCD outcomes	Similar to Caribbean peers	Need for prevention and awareness
35–44	Rising obesity, hypertension, and diabetes clustering [2,5]	Some early cardiovascular events	Slightly higher risk clustering than the Caribbean average	Workplace-based screening recommended
45–54	High obesity, diabetes, metabolic syndrome [2,5,6,12]	Notable rise in stroke and IHD cases	Greater clustering vs America's average	Integration of NCD care in primary health
55–64	High diabetes, hypertension [1-3]	Manifest cardiovascular disease, heart failure, CKD	Matches the Caribbean trend but has higher female risks	Targeted secondary prevention is needed
25–64 (aggregate)	Persistent obesity & metabolic risks [5,7]	Significant productivity loss due to NCD morbidity	Tobacco risk is lower than the regional averages	Stronger diet & activity policies needed

Discussion

The evidence confirms a substantial NCD burden in Jamaica concentrated within working ages, with sex, age, and socio-economic gradients that align with, yet also differ from, regional patterns. Compared with literature from higher-smoking Caribbean settings, Jamaica's relatively low adult tobacco prevalence repositions policy emphasis toward obesity, diet quality, and physical inactivity [2]. JHLS III's substantial female burden of obesity and central adiposity contrasts with some Latin American contexts with narrower sex gaps, suggesting the need for gender-responsive approaches [1,5]. These differences matter for intervention design, particularly in workplace and community settings.

Our synthesis underscores mid-life as a critical intervention window. With obesity peaking at 35–44 years and dyslipidaemia at 45–54 years, prevention and control strategies must engage adults before clinical disease consolidates [1]. International literature supports bundled workplace programmes—screening, counselling, healthier food procurement, stair prompts, and active commuting support—as cost-effective in similar economies. Jamaica's urban-rural differences in physical activity and obesity imply that transport and urban-planning levers could yield sizeable benefits, paralleling experiences in other upper-middle-income countries [1,2,5,6,12]. These alignments with global practice strengthen the case for multi-sectoral action.

Policy implementation has advanced but remains incomplete. The 2013–2018 NCD Strategic Plan articulated comprehensive aims, and subsequent PAHO monitoring recorded partial progress [8,11,12]. Compared with countries that have adopted robust front-of-pack labelling, salt targets, and trans-fat bans, Jamaica's policy package can be further strengthened and fully executed [5,6,12]. At the same time, primary-care quality for hypertension and diabetes control - diagnosis, treatment, adherence, and control—needs systematic improvement, as suggested by JHLS III cascade indicators and Ministry reports [1,3,7]. These findings echo regional literature on care-cascade fragilities.

Equity considerations are central. JHLS III documents higher central obesity with greater education and assets, yet higher stroke prevalence with lower education and assets, suggesting different mechanisms across risk accumulation and clinical events [1]. Rural-urban contrasts and sex differences require tailored strategies, including targeted interventions for women with high central adiposity and for rural communities with limited access to specialized care. Earlier Jamaican work linking chronic disease with inability to work hints at feedback loops between health and employment, meriting integrated social-protection and labour-market policies [14]. Such approaches resonate with socio-ecological frameworks.

Finally, surveillance and research gaps constrain precision. Age-disaggregated, working-age-specific estimates are not uniformly available across all outcomes, and longitudinal data linking NCDs to labour productivity in Jamaica are scarce [1-2,4,9]. Compared with literature from other upper-middle-income settings that quantify economic losses, Jamaica needs routine linkage between health, labour-force, and social-protection datasets. Closing these gaps would refine burden estimates and strengthen business cases for workplace and fiscal policies. Until then, the convergence of survey, administrative, and international benchmarking provides a robust basis for action.

Conclusion

amaica faces a pronounced NCD burden that affects the majority working-age population, with obesity, diabetes, hypertension, and chronic kidney disease especially salient. Descriptive indicators from JHLS III and Ministry reports reveal substantial risk clustering in mid-life and marked sex and socio-economic gradients [1,3]. Bivariate and inferential evidence associates residence, education,

and material living standards with NCD outcomes, while international benchmarks confirm that Jamaica's profile is typical for adiposity and diabetes but distinctive for relatively low tobacco use [2,5,6]. These characteristics reorient priorities toward diet and physical-activity environments, alongside sustained tobacco and alcohol control Policy architecture exists but requires renewed implementation vigour. The national NCD strategic plan and PAHO/WHO monitoring frameworks provide credible roadmaps, yet full delivery on food policies, marketing restrictions, and care-cascade performance has been uneven [8,6,11,12]. Primary care must improve diagnosis, treatment, and control rates for cardiometabolic conditions, particularly for women with high central adiposity and for rural residents with higher CKD prevalence [1]. Workplace settings are under-utilised venues for prevention and management despite their potential to protect productivity.

The working-age lens adds urgency. With about 73% of Jamaicans aged 15-64, preventing premature morbidity and mortality yields significant economic and social returns [4]. International evidence indicates that bundled, environment-shaping interventions and chronic-care improvements can deliver impact in similar contexts, and Jamaica's risk architecture suggests exceptionally high returns from diet and activity policies [2,5,6,12]. While data gaps persist - particularly on productivity losses - the weight of current evidence warrants decisive, multi-sectoral action.

In sum, Jamaica's NCD challenge among working-aged adults is solvable but time-sensitive. A coordinated package - fiscal and regulatory nutrition policies, active-living infrastructure, strengthened primary care, and workplace programmes - can bend trends, reduce inequities, and safeguard national development. Continuous surveillance and evaluation should anchor this agenda, ensuring accountability and learning as implementation scales.

Recommendations

First, strengthen population-level nutrition policies. Implement interpretive front-of-pack labelling, set sodium and added-sugar targets, restrict marketing of unhealthy foods to children, and consider or enhance fiscal measures on sugary drinks, aligning with PAHO/WHO best practice and regional exemplars [5,6,12]. These actions address Jamaica's comparatively high adiposity burden more directly than tobacco-centric strategies.

Second, create activity-friendly environments and programmes. Invest in safe sidewalks, parks, and active-transport infrastructure in urban centres where inactivity is concentrated; adopt workplace physical-activity policies (active breaks, stair prompts, flexible schedules) and support community sport and recreation, particularly for women, mirroring patterns of low female physical activity [1,2]. Such environmental measures compare favourably with literature from peer settings showing sustained gains.

Third, upgrade primary-care NCD cascades. Institutionalize routine screening for hypertension, diabetes, dyslipidaemia, and CKD in working-age adults; ensure affordable access to essential medicines and diagnostics; and implement adherence support, team-based care, and patient registries with performance feedback [1,3,7]. Evidence from comparable contexts shows improved control rates with these models, addressing gaps identified in Jamaican surveys.

Fourth, embed workplace-centred prevention and management. Encourage employers to offer periodic risk assessments, on-site counselling, healthy canteen standards, and referral
pathways to primary care. Prioritise sectors with sedentary work and populations with high female employment to address sex-specific adiposity patterns [1,2]. Compared to general campaigns, workplace programmes can more directly influence mid-life risk.

Fifth, close surveillance and research gaps. Update the National NCD Strategic and Action Plan with measurable targets; establish data linkages between health, STATIN labour-force, and social-protection systems to quantify productivity losses; and commission longitudinal analyses to evaluate policy impacts [4,7,9,11,12]. These steps bring Jamaica in line with regional monitoring standards and inform continuous course-correction (Tables 7-11).

Table 7: Prevalence of Major NCD Risk Factors among Adults in Jamaica (≥15 years).

Risk Factor / Condition	Prevalence (%)	Source
Obesity (BMI ≥30 kg/m^2)	28.6	JHLS III (2016–2017) [1]
Overweight/Obesity (BMI ≥25 kg/m^2)	53.8	JHLS III (2016–2017) [1]
Central obesity (waist-based)	43.7	JHLS III (2016–2017) [1]
Diabetes mellitus (self-reported & screened)	~12	JHLS III (2016–2017) [1]
Chronic kidney disease	15.2	JHLS III (2016–2017) [1]
Hypertension (raised BP or treatment)	~25–30	JHLS III & MOHW [1,3]
Dyslipidaemia (abnormal lipids)	12–15	JHLS III (2016–2017) [1]
Insufficient physical activity	32.6	PAHO (2016) [2]
Current tobacco use	8.6	PAHO (2023) [2]
Current alcohol use	41.4	JHLS III [1]

Table 8: NCD Mortality Distribution in Jamaica.

Cause of Death (NCDs)	Share of NCD Mortality (%)	Source
Cardiovascular diseases	~40	MOHW Vitals Brief 2023 [3]
Cancers	~24	MOHW Vitals Brief 2023 [3]
Diabetes-related deaths	~12–15	WHO Country Profile [10]
Chronic respiratory diseases	~6	WHO Country Profile [10]
Other NCDs	~15	WHO Country Profile [10]

Table 9: Bivariate Patterns of NCD Risk by Sociodemographic Characteristics, Jamaica.

Characteristic	Observed Pattern	Source
Sex	Higher obesity, central obesity, lower physical activity in women; higher alcohol use in men	JHLS III [1]
Age	Obesity peaks at 35–44 years; dyslipidaemia at 45–54 years; CVD outcomes rise ≥55 years	JHLS III [1]
Residence	Urban residents show higher obesity and lower physical activity; rural residents show higher CKD prevalence.	JHLS III [1]
Education	Higher central obesity at higher education levels; stroke prevalence is higher at lower education levels.	JHLS III [1]
Household assets (wealth)	Central obesity increases with wealth; stroke prevalence is higher among poorer adults.	JHLS III [1]
Employment status	Poor health is associated with the inability to work among chronic disease patients	Bourne (2009) [14]

Table 10: Multivariable Associations of NCD Outcomes in Jamaica (Selected Findings).

Outcome	Independent Predictors (adjusted)	Notes	Source
Central obesity	Higher education, higher wealth, female sex	Adjusted for age and residence	JHLS III [1]
Chronic kidney disease	Rural residence, increasing age	Adjusted multivariable models	JHLS III [1]
Poor health status in adults with chronic disease	Older age, rural residence, and inability to work	Regression models	Bourne (2009) [14]

Table 11: International Comparison of Selected NCD Risk Factors: Jamaica vs Regional Averages.

Indicator	Jamaica (%)	LAC Regional Average (%)	Source
Adult overweight/obesity	61.1	~59	PAHO 2024 [2]
Female obesity	36.9	~31	GNR 2024 [5]
Male obesity	18.1	~20	GNR 2024 [5]
Diabetes prevalence (adults)	~12	~10	GNR 2024 [5]
Current tobacco use	8.6	13–15	PAHO 2023 [2]
Insufficient physical activity	32.6	30–32	PAHO 2016 [2]

References

1. Ministry of Health & Wellness, Jamaica. Jamaica Health and Lifestyle Survey 2016-2017 (JHLS III). Kingston: MOHW; 2018/2024 electronic edition. Available from: Ministry of Health & Wellness website.

2. Pan American Health Organization (2024) Health in the Americas+: Jamaica – Noncommunicable diseases and risk factors (updated 19 Oct 2024). Washington (DC): PAHO.

3. Ministry of Health & Wellness, Jamaica (2023) Vitals - NCDs (April 2023 brief). Kingston: MOHW.

4. World Bank. Population ages 15–64 (% of total population) – Jamaica (2024) Washington (DC): World Bank.

5. Global Nutrition Report. Jamaica Country Nutrition Profile. Bristol: Development Initiatives; 2024/2025 update.

6. PAHO (2025) ENLACE: Data portal on NCDs, mental health, injuries and risk factors (Americas). Washington (DC): PAHO.

7. Ministry of Health & Wellness, Jamaica (2024) Population Health Status Report 2000–2022. Kingston: MOHW.

8. World Obesity Federation (2025) Jamaica: Policies, interventions and actions (updated 18 Jul 2025). London: WOF.

9. Statistical Institute of Jamaica (STATIN). Labour Force Statistics portal. Kingston: STATIN; 2024–2025.

10. World Health Organization (2025) Jamaica - WHO data country profile and cause of death overview. Geneva: WHO.

11. Ministry of Health and Environment, Jamaica (2013) National Strategic and Action Plan for the Prevention and Control of Non-Communicable Diseases (NCDs) 2013–2018. Kingston: Government of Jamaica.

12. Pan American Health Organization (2020) NCDs Progress Monitor 2020: Jamaica country profile. Washington (DC): PAHO.

13. WHO Country Planning Cycle. Jamaica - National Strategic and Action Plan for the Prevention and Control of NCDs (2013–2018). Geneva: WHO; repository entry.

14. Bourne PA, McGrowder DA (2009) Health status of patients with self-reported chronic diseases in Jamaica. North American Journal of Medical Sciences 1(7): 356-364.