

Vitals: A Quarterly Report of the Ministry of Health Ministry of Health and Wellness, Jamaica 2019

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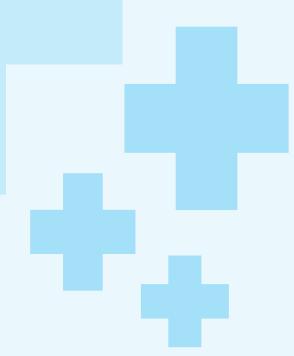
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Telephone: 1-888-ONE-LOVE

E-mail: vitals@moh.gov.jm Website: www.moh.gov.jm



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EDITORIAL





The Ministry of Health & Wellness is pleased to present this special edition of Vitals, which focuses on the health trends and statistics of our children from birth to adolescence. In this edition, we will explore health status indicators for this age group.

The first 1,000 days of a child's life, conception to two years, is critical to attaining optimal health. In light of this, the Ministry of Health & Wellness' Early Stimulation Programme is being implemented by the Family Health Unit in collaboration with the Caribbean Institute of Health Research (CAIHR) at the University of the West Indies, Mona. The goal is to provide relevant, evidence-based interventions to optimise and support early childhood development, with emphasis on vulnerable groups, utilising the primary care approach and the involvement of the family unit, health team and the wider community.

The period of adolescence poses new challenges to an aging health service and is characterised by rapid physical, cognitive and social changes, including sexual and reproductive maturation. Adolescents are generally healthy, but their risk-taking behaviours pose challenges to their health and development.

This issue of Vitals shows some concerning trends among children and adolescents: (1) assault and transport accidents were leading causes of death for persons 5 to 19 years in 2016; (2) the prevalence of overweight in children under 5 years has doubled between 1997 and 2014; (3) One out of three adolescents were overweight or obese in 2017; (4) one out of four adolescents had seriously considered suicide in 2010 and 2017.

As the Ministry of Health & Wellness, we have already begun to address these concerning trends through various programmes and partnerships. The Jamaica Moves in Schools Programme, including the gradual restriction on sugary drink and the draft National School Nutrition Policy in partnership with the Ministry of Education, Youth and Information will address the alarming obesity levels of our children. Primary care physicians have been trained in the Mental Health Global Action Plan Modules (mhGAP), including the detection, treatment of depression and suicidal risk behavior.

I congratulate the Vitals' team for providing a statistical report of such high standards that supports evidence based planning and monitoring for health.

Dr. the Hon. Christopher Tufton, MP Minister of Health & Wellness



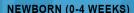
STATISTICS AT A GLANCE



CHILD (1 YEAR - 9 YEARS)

- Immunization
 MMR1 (89%)
 (EPID, 2018) • MMR2 (82%)
- Nutrition
 - Undernutrition (0 to 59 months)
 Underweight (2.3%), Stunting (6.2%),
 Wasting (3.6%)
 Overnutrition (0 to 59 months)
 Overweight (8.5%)
 (JSLC, 2014)

- Education
 Primary Completion Rate Male 99.6 Female 99.9
 Primary Net Enrolment Rates Male 93.5, Female 92.9, Total 93.2 (MOE, 2015)
- Under 5 mortality rate: 16.4 per 1,000 live births (RGD, 2016)



- Live Births 33,979 (STATIN, 2017) (Preliminary)
- Birth Weight 9.6% (low birth weight) (HMSR, 2017) (Provisional)
- **Neonatal Mortality Rate 12.0 per 1,000** live births (*RGD*, 2016)



INFANT (0-12 MONTHS)

- Nutrition
 - Exclusive Breastfeeding 2016
 - 6 weeks (48.2%

 - 3 months (29.5%) 6 months (23.8%)

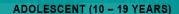
(MCSR, 2016)

- Immunization
 - · POLIO3 (98%)
 - BCG (93%)DPT3 (97%)HIB3 (98%)
 - HEPB3 (97%)
 - (EPID, 2018)

Infant mortality rate: 15.5 per 1,000 live

(RGD, 2016)





- Age 13-17 years (GSSHS, 2017)

 Sexual Health

 46.7% had sexual intercourse

 61.8% before age 14 for the first time

 64% used a condom during the last sexual intercourse
- - 19.4% used any tobacco products
 71.1% drank alcohol before age 14 for
 the first time
 29% drank alcohol until they were really
 drunk one or more times
- Suicide / Injuries / Violence
- 25% seriously considered attempting suicide
 8.8% did not have any close friends
 23.9% were bullied
 31.2% were in a physical fight
 39.3% were seriously injured

- Nutrition
 - 69.1% drank carbonated beverages one or more times per day 23.3% were overweight 9.2% were obese
- **Physical Activity**
- 19% attended physical education classes three or more days each week 56.4% spent three or more hours per day sitting and watching television, playing computer games etc
- Lower Secondary Net Enrolment Rates Male **79.4**, Female **84.8**, Total **82.1** Upper Secondary Net Enrolment Rates Male **60.4**, Female **72.2**, Total **66.2** (MOE, 2015)
- 5-19 years 47.4 per 100,000 population (RGD 2016)

Sources: Expanded Programme on Immunization Database (EPID), Ministry of Health, 2018

Registrar General's Department (RGD), 2017 (Preliminary Data)

Statistical Institute of Jamaica (STATIN), 2017

Hospital Monthly Statistical Report (HMSR), Ministry of Health, 2017 (Provisional Data)

Monthly Clinic Summary Report (MCSR), Ministry of Health, 2016

Jamaica Survey of Living Conditions (JSLC), 2014

Global School-based Student Health Survey (GSSHS), 2017

Ministry of Education (MOE), 2015



CHILD HEALTH THE FIRST 1,000 DAYS

Childhood' has been defined as the period between 0 and 18 years of age (UNICEF, 1990), while 'early childhood' spans the time between birth and 8 years of age (UNESCO, 2018). The International Convention on the Rights of The Child recognizes this period as a protected space during the human life-course, critical to the development of the individual and to the health of societies (UNICEF, 1990). The well-being of the child is threatened by many external factors and the threats are greatest within the first 5 years of life, moreso within the first weeks of life (WHO, 2018). The influences on wellbeing begin while the child is in the womb, and continue into the early weeks and months of life (Jacob, et. al, 2017). During this time, interventions such as good antenatal care, a skilled birth attendant, access to safe water and good hygiene, as well as immunization and good nutrition - beginning with the early introduction of breastfeeding - are deciding factors in survival that set the tone for the future health of the individual.

The first 1,000 days of life span the period from conception to 2 years of age (Cusick S., Georgieff., M. (n.d.).), and is a critical time which influences whether a child develops to his or her fullest potential. The most rapid period of brain growth occurs during the first 1,000 days, which represents the 'greatest opportunity to provide optimal nutrition' but also the 'greatest brain vulnerability to nutrition deficit' (Cusick S., Georgieff., M. (n.d.)). The effects of malnutrition during this window may cause irreparable damage from which the child is unable to recover. Critical nutrients needed for optimal growth and development include adequate energy provided by carbohydrates, high quality protein, poly-unsaturated fatty acids, iron, zinc, copper, iodine, choline, folate, vitamins A, B6 and B12, with iron being critical to mental development and functioning in later life. The following is a guide to good nutrition during the varying phases of growth and development in the first 1,000 days:



PREGNANCY

The mother and father should practice good nutrition to maintain an optimal health status prior to conception. (Pietrobelli, 2017)
 A diet rich in iron and folic acid is encouraged

BABY

- Exclusive breastfeeding for the first six months of life is recommended
- Continued Breastfeeding after six months up to 2 years or beyond is encouraged, in tandem with proper introduction of complementary foods at six months
- Introduce a variety of nutrient-rich foods, paying attention to foods rich in iron and Vitamin A, high quality protein and adequate energy to support growth
- Limit excessive sugar intake and delay use of cow's milk in the first year of life

TODDLER

- A variety of foods from the six food groups including fruits, vegetables, foods from animals, legumes and staples (carbohydrate sources) are essential
- Parents should practice the dietary behaviours they want their children to adopt

Table adapted from:

The Early Childhood Commission. (2017). Nutrition and the 1st 1000 days of a child's life. Retrieved from https://ecc.gov.jm/nutrition-and-the-1st-1000-days-of-a-childs-life/

Other Sources:

United Nations Children's Fund (UNICEF). (1990). Convention on the rights of the child.

Retrieved from United Nations Human Rights Office of the High Commissioner (OHCHR) at https://www.ohchr.org/en/professionalinterest/pages/crc.aspx

 $The \ United \ Nations \ Educational, \ Scientific \ and \ Cultural \ Organization \ (UNESCO). \ (2018). \ Early \ childhood \ care \ and \ education. \ Retrieved \ from \ https://en.unesco.org/themes/early-childhood-care-and-education$

Jacob, C., Baird, J., Barker, M., Cooper, C. & Hanson, M. (2017). The importance of a life-course approach to health: Chronic disease risk from preconception through adolescence and adulthood. University of Southampton. Retrieved from https://www.who.int/life-course/publications/importance-of-life-course-approach-to-health/en/

Cusick S., Georgieff., M. (n.d.). The first 1000 days of life: The brain's window of opportunity. Retrieved from https://www.unicef-irc.org/article/958-the-first-1000-days-of-life-the-brains-window-of-opportunity.html

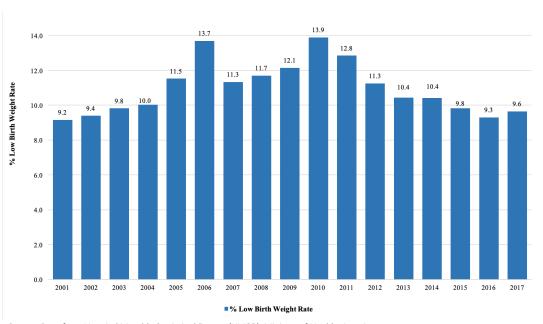
Pietrobelli, A., Agosti, M., & MeNu Group. (2017). Nutrition in the first 1000 days: Ten practices to minimize obesity emerging from published science. International Journal of Environmental Research and Public Health, 14(12), 1491. doi: 10.3390/ijerph14121491



CHILD HEALTHLOW BIRTH WEIGHT

Low birth weight (LBW) is defined as a birthweight of less than 2500 g (WHO, 2014). Infants born with LBW are at an increased risk of illness and death, particularly in the first month of life, and may have an increased risk of developing high blood pressure, cardiovascular disease, type 2 diabetes, renal and other diseases in later life. LBW may result from prematurity, or restriction of the growth of the fetus in the mother's womb. Factors associated with LBW include obstetric conditions (multiple births, short interval/spacing between births) maternal complications causing changes to the placenta or umbilical cord, maternal disease (infections, hypertension and diabetes), poor nutrition including anemia in pregnancy, low maternal weight, as well as other factors such as low socioeconomic status, age of the mother, and smoking, drinking and other drug use of the mother while pregnant. While some risk factors for LBW cannot be altered, it is recognized that some are lifestyle-related, and may be able to be prevented.

PERCENTAGE LOW BIRTH WEIGHT OF ALL BIRTHS AT GOVERNMENT HOSPITALS



Source: Data from Hospital Monthly Statistical Report (HMSR), Ministry of Health, Jamaica. Data for 2016 is revised. * Data for 2017 is provisional

There were 32,782 live births occurring in government hospitals (including the University Hospital of the West Indies) in Jamaica (approximately 96.4%) during 2017, of which 9.6% had birth weights below 2500 g (5.5lbs)*. There has been a declining trend in percentage low birth weight between the period 2010-2017, with 2010 having the highest rate of 13.9%. From 2001 to 2010 there was a general increase in low birth weight and from 2011 a general decrease. In Jamaica more than 95% of births occur in public hospitals, for example in 2017, approximately 96.4% (32,782 live births in public hospitals of the 33,979 live births in Jamaica.)

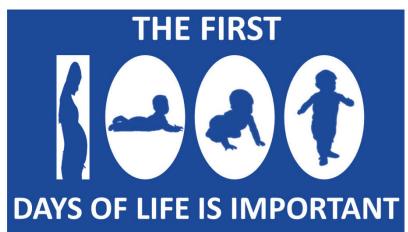
In 2012, the World Health Assembly endorsed a global low birth weight target to reduce the number of infants born with LBW by 30% by 2025. Pregnant women are encouraged to seek prenatal care and to adopt lifestyle practices to optimize the health of mother and baby. This may include taking folic acid and iron supplements during pregnancy as well as the cessation of smoking.

Sources: World Health Organization (WHO). (2014). WHA Global Nutrition Targets 2025: Low birth Weight Policy brief. Retrieved from https://www.who.int/nutrition/topics/globaltargets_lowbirthweight_policybrief.pdf



CHILD HEALTH EARLY STIMULATION PROGRAMME

With the decrease in child mortality and the introduction of the Sustainable Development Goals in 2016, attention has now shifted to improvements in the identification of children at-risk of developmental delays and disabilities, the optimisation of child development, and the implementation of related programmes and activities with the potential for long-term economic productivity. Additionally, biological, behavioural and psychosocial processes in pregnancy and early childhood have been linked with the development of chronic disease and mental illness patterns in adulthood. The focus of preventative interventions in the first 1,000 days of a person's life has proven beneficial in deterring the development of disease and producing one socially more functional adult.



Images from: www.openclipart.org. www.shutterstock.com

Despite the many early stimulation programmes and interventions implemented in Jamaica over the years for the 0-3 years target population, many parents in Jamaica often do not have access to opportunities that enable development of children to their full potential. To address this problem, the Family Health Unit has commenced the implementation of the Ministry of Health & Wellness' Early Stimulation Programme in collaboration with the Caribbean Institute of Health Research (CAIHR) at the University of the West Indies, Mona. The goal is to provide relevant, evidence-based interventions to optimise and support early childhood development, with emphasis on vulnerable groups, utilising the primary care approach and the involvement of the family unit, health team and the wider community.

The programme will be implemented on a phased basis. In Phase 1, home visits will be conducted by Community Health Aides (CHAs) in one health district in each of the 13 Parish Health Departments across the island using the Reach-Up Jamaica home visiting curriculum developed by the child development team at CAIHR. Home visits are scheduled to begin in 2019 after training of CHAs. Phase 1 will continue for one year, after which the programme will be evaluated and scaled up. There are also plans to initiate a programme based at health centres to educate parents attending child health clinic on early stimulation.

The Ministry of Health & Wellness is committed to ensuring the successful implementation of this programme and the achievement of the desired outcomes for the child, parents and family. These outcomes include: improved parent-child interaction and play; improved self-confidence in parents and enjoyment in bringing up their children; and improved language, intellectual, behavioural and emotional development in children. The programme is also expected to have positive long-term impact on the health system and on society on a whole as optimisation of child development has been proven to deter the development of chronic disease and produce more socially functional adults that have better educational attainment, improved mental health, reduced violent behaviour and increased income.



CHILD HEALTH PREVENTION OF MOTHER-TO-CHILD TRANSMISSION

In the 1980s, syphilis was made a priority sexually transmitted infection due to its prevalence and the risk of mother-to-child transmission. Due to the possibility of curing syphilis, interventions were made to increase case detection and treatment, with a focus on pregnant women in order to prevent mother-to-child transmission.

In the late 1980s and the 1990s, HIV/AIDS was among the top 10 causes of death in children in Jamaica. In order to address this problem, a programme for the Prevention of Mother-to-Child Transmission (pMTCT) of HIV in Jamaica was implemented as a pilot programme in 2000. In this programme, mothers were counselled and tested for HIV and both the mother and new-born infant were given medication (Nevirapine) to prevent transmission. In 2002, The Kingston Paediatric and Perinatal HIV/AIDS Programme (KPAIDS) was launched to identify HIV-infected pregnant women and provide therapy and follow-up for HIV-exposed infants.

Between 2005 and 2010, there were improvements in laboratory testing and linkage of HIV-infected pregnant women to care. The KPAIDS and other initiatives led to a large decline in mother-to-child transmission of HIV over the decade.

In 2009, the Ministry of Health in collaboration with the KPAIDS team – now renamed Jamaica's Paediatric, Perinatal, Adolescent Infectious Diseases Programme (JaPPAIDS) – began an initiative to implement pMTCT services islandwide. Due to these initiatives, among others, the first decade of the 21st century saw transmission of HIV from mother to child in Jamaica decline to less than 5% in HIV-affected pregnancies.

The Elimination of Mother-to-Child Transmission Programme (eMTCT) now focusses on HIV, Syphilis and Hepatitis B. This elimination will depend on highly skilled health workers, adequate laboratory support, and maintenance of drug supplies for treatment. It is also important to have a population that is knowledgeable about the diseases and that has access to adequate health services for management. Various initiatives have been undertaken by the Ministry of Health to fill any gaps and to ensure the fulfilment of the goal of elimination.

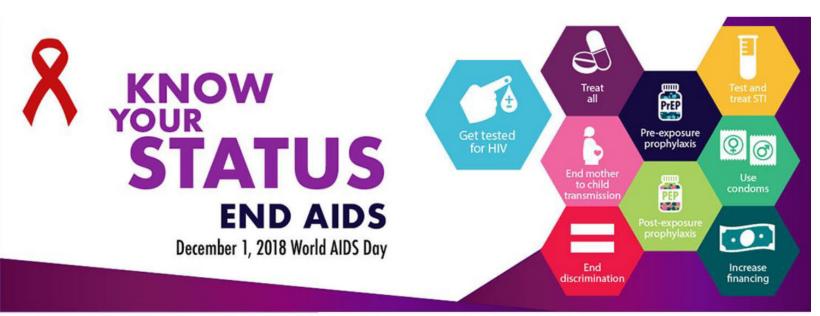
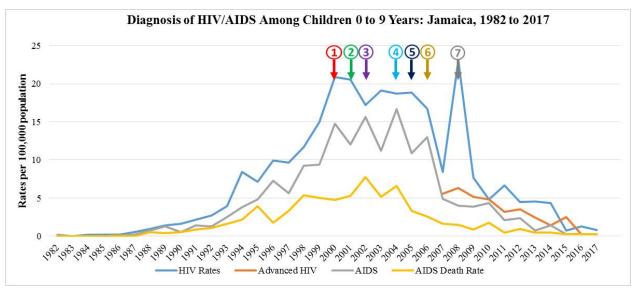


Image from: www.paho.org

CHILD HEALTH PREVENTION OF MOTHER-TO-CHILD TRANSMISSION

DIAGNOSIS OF HIV/AIDS AMONG CHILDREN 0 TO 9 YEARS: JAMAICA, 1982 TO 2017



Source: HIV AIDS Tracking System (HATS) Database, 2018.

PMTCT INTERVENTIONS

- In July of 2000, a Call to Action was done and the programme in Jamaica began with a nevirapine demonstration project that targeted pregnant women and their infants in Greater Kingston.
- In 2001, a "Further Call to Action" was done. This was a Joint Collaboration between the Ministry of Health and the University Hospital of the West Indies to address the paediatric and perinatal HIV Epidemic.
- In September of 2002, Jamaica introduced Zidovudine chemoprophylaxis to mothers and infants in Greater Kingston.
- In 2004, the HIV Antiretroviral Drug Treatment (ART) Programme began.
- In 2005, the programme expanded islandwide through the Jamaican Perinatal, Paediatric and Adolescent HIV/AIDS Programme (JaPPAIDS).
- In 2006, a combination of Antiretroviral Drug Treatments (ART) were used in pregnant women and this continued through to 2015.
- In late 2009, began early infant diagnosis utilizing dried blood spot testing by RNA/DNA polymerase chain reaction (PCR).

Source: Christie Celia DC, Palmer Paulette M, Tomlinson J, Green-Douglas T, Hamilton M, et al. (2017) Achieving Elimination of Vertical Transmission of HIV in Jamaica. Ann Public Health Res 4(2): 1061

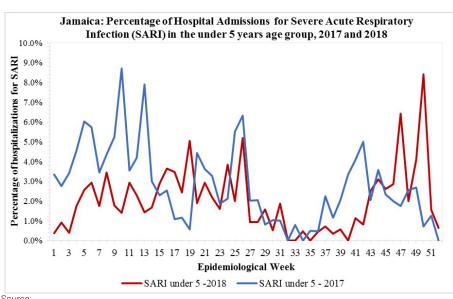


CHILD HEALTH INFLUENZA IN CHILDREN

DISTRIBUTION OF SARI CASES BY AGE GROUP: JAMAICA 2018



JAMAICA: PERCENTAGE OF HOSPITAL ADMISSIONS FOR SEVERE ACUTE RESPIRATORY INFECTION (SARI) IN THE UNDER 5 YEARS AGE GROUP, 2017 AND 2018



Data from National Surveillance Unit (NSU), National Epidemiology Unit (NEU), Ministry of Health, Jamaica.

Influenza is a highly contagious respiratory illness and is commonly referred to as 'flu'. There are several subtypes of the influenza viruses, which cause mild to severe illness. Common symptoms of influenza infection include sudden onset of fever or chills, cough, headache, runny/stuffy nose, sore throat, muscle pains or fatigue. Children may also have vomiting or diarrhea.

Severe Acute Respiratory Illness (SARI) is used as an indicator for influenza. The case definition for SARI is a patient who is admitted to hospital with fever (380C) or history of fever and cough for less than 10 days.

Influenza disproportionately affects the under 5 years age group each year with the 0-4 years age category accounting for 78.6% (385/490) of cases in 2017, and 71.9% (261/363) of total cases in 2018.

Among the under 5 years age group, the 2 to 4 years age group account for approximately half of the cases (49%). The remainder of the cases were distributed among the other age categories under surveillance: under 6 months (16%), 6 to 11 months (14%) and 12 to 23 months (21%).

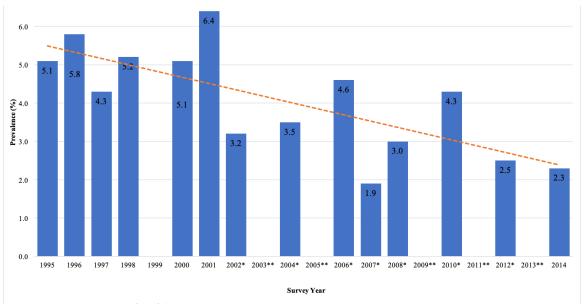
When compared to 2017 surveillance data, the percentage of hospital admissions for SARI in the under 5 age group in 2018 was generally lower than in 2017. Higher figures were observed in 2018 between epidemiological weeks 15 to 19 and 45 to 52 (i.e. in April, and November to December 2018). The percentage of hospital admissions for SARI ranged from 0% to 8.4% in 2018 with a mean of 2.1%, while in 2017 the range was from 0% to 8.7% and the mean was 2.8%.



CHILD HEALTHNUTRITION STATUS

Undernutrition (low weight for age) in children 0 to 59 months has been on an overall decline since the early 2000s. Between 1995 and 2014, the highest instance of undernutrition was in 2001 with 6.4%. The lowest recorded instance of undernutrition in the 19-year period was in 2007, which was 1.9%.

UNDER-NUTRITION: LOW WEIGHT FOR AGE AMONG CHILDREN 0 TO 59 MONTHS

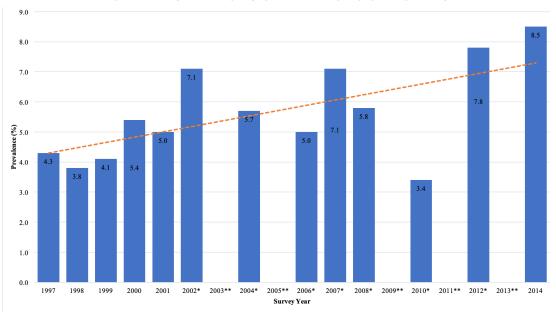


^{*}Calculated using updated WHO guidelines (2006) for determining nutrition status

**Survey was not conducted in that year

Overweight (excess weight for height) among children 0 to 59 months has increased since the late 1990s. Between 1997 and 2014, the prevalence has doubled from 4.3% to 8.5%.

OVERWEIGHT AMONG CHILDREN 0 TO 59 MONTHS



^{*}Calculated using updated WHO guidelines (2006) for determining nutrition status

Source: Data from Jamaica Survey of Living Conditions, Planning Institute of Jamaica (PIOJ), and Statistical Institute of Jamaica (STATIN)

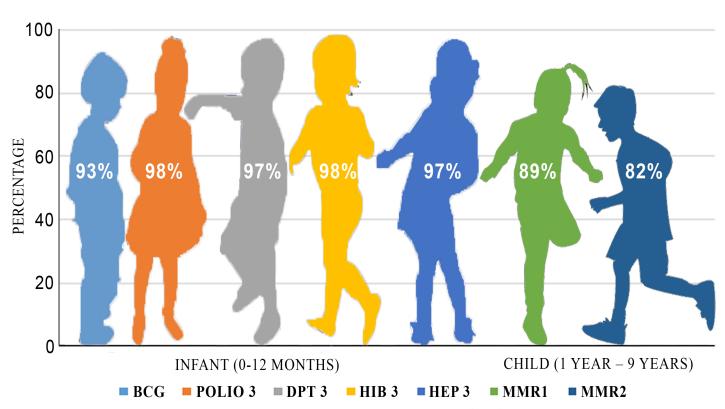


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^{**}Survey was not conducted in that year

CHILD HEALTH IMMUNIZATION

VACCINATION COVERAGE 2018



Source: Data from Expanded Programme on Immunization Database, Family Health Services, Ministry of Health. Jamaica, 2018

Vaccination Coverage for 2018:

From birth to 11 months: 93% of children received the BCG Vaccine; 98% the third dose of the Polio Vaccine; 97% the third dose of the Diphtheria Pertussis Tetanus (DPT) Vaccine; 97% Hepatitis B Vaccine; 98% Haemophilus influenzae Type B Vaccine.

For children 12 to 23 months: 89% received the first Measles, Mumps and Rubella (MMR) vaccine and 82% received the second dose of MMR.

MOH **VITALS** May 2019 13



^{*-} Data is Preliminary for 2018

CHILD HEALTH DEATHS

The under 5 death rate increased from 14.8 per 1,000 live births in 2000 to 16.4 per 1,000 live births in 2016. The rank of the 10 leading causes of death in the under 5 age group has also changed. Notably, deaths due to diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism has moved from position 5 in 2000 to position 12 in 2016.

Certain conditions originating in the perinatal period and congenital malformations, deformations and chromosomal abnormalities were the 1st and 2nd ranked leading causes of death in the under 5 age group in 2000 and also retained those positions in 2016.

Leading Causes of Death in Jamaicans Under 5					
	Total Mortality Rate = 14.8			Total Mortality Rate = 16.4	
Rank	Disease/Condition	Mortality Rate	Mortality Rate	Disease/Condition	Rank
1	Certain conditions originating in the perinatal period	10.1	10.3	Certain conditions originating in the perinatal period	1
2	Congenital malformations, deformations and chromosomal abnormalities	1.5	3.1	Congenital malformations, deformations and chromosomal abnormalities	2
3	Certain infectious and parasitic diseases	0.6	0.7	Diseases of the respiratory system	3
4	Diseases of the respiratory system	0.5	0.6	Certain infectious and parasitic diseases	4
5	Diseases of the blood and blood- forming organs and certain disorders involving the immune mechanism	0.4	0.3	External causes of morbidity and mortality	5
6	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	0.4	0.3	Diseases of the nervous system	6
7	External causes of morbidity and mortality	0.4	0.2	Endocrine, nutritional and metabolic diseases	7
8	Diseases of the nervous system	0.3	0.2	Neoplasms	8
9	Neoplasms	0.2	0.2	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	9
10	Endocrine, nutritional and metabolic diseases	0.2	0.1	Diseases of the blood and blood- forming organs and certain disorders involving the immune mechanism	12

Mortality Rate per 1,000 Live Births

External causes include sudden and violent cases reported by the police but not yet registered by the Registrar General's Department (RGD) for 2016.

Source: Registrar General's Department (RGD).



CHILD HEALTH

BEST PRACTICE: JA KIDS THE JAMAICAN BIRTH COHORT STUDY 2011



Jamaica's first birth cohort study took place 32 years ago in 1986. The Jamaican Birth Cohort Study 2011 (JA Kids) is the second national birth cohort study of Jamaican children and includes babies born in all 14 parishes in Jamaica between July 1, 2011 and September 30, 2011. Approximately 11,124 children were born in Jamaica during this period.

This seven-year birth cohort study was conducted by Principal Investigator Professor Maureen Samms-Vaughan and a team of researchers from The University of the West Indies (UWI). The study enrolled approximately 9,700 mothers in the antenatal period and followed children and families for the first 2,000 days or 4-5 years.

METHODOLOGY

- April 16, to September 14, 2012
- 7,600 primary caregivers interviewed via telephone, primarily mothers
- Detailed follow-up of children's health and development, family functioning, maternal and paternal health and well-being, parental stress, home learning environment and child-care arrangements



CONTACT

· Office dass

BIRTH CONTACT

9-12 MONTH

- 9,700 mothers enrolled
- 3,400 fathers who attended the hospital at the birth of their child
- Interviews conducted at birth using separate questionnaires for mothers and fathers
- 26 public and private hospitals participating



CONTACT

- 2,450 telephone interviews following up on children's health and development
- 1,035 face to face interviews
- 3,485 mothers report on fatherhood
- 389 fathers (36.8%) attended and completed questionnaire
- Child assessments done

a specially selected group of 1,300 who had participated in majority of previous contacts) interviewed face to face Child assessments done

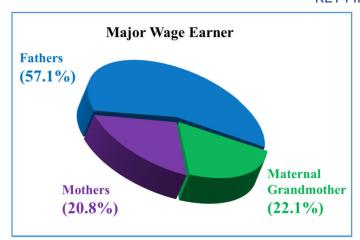
994 families (79% of

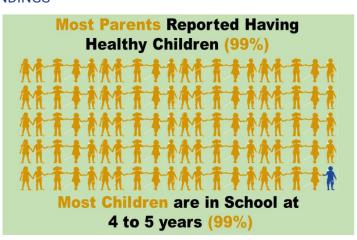




CHILD HEALTH BEST PRACTICE: JA KIDS THE JAMAICAN BIRTH COHORT STUDY 2011

KEY FINDINGS





91% Fathers have a Relationship with child at Birth Father Relationships 45% Fathers are living with a child at 4 years





JA KIDS Management and Team. From the left; Miss Twana Dinnall (Logistics and Data Manager), Prof. Maureen Samms-Vaughan (Principal Investigator), Mrs. Charlene Coore-Desai (Study Manager), Miss Jody-Ann Reece (Research Manager) and Mrs. Sydonnie Pellington (Senior Psychologist)

35.6%Mothers Receive Social Support

16.9%

Mothers were enrolled in the PATH Programme

The PATH Programme was the single largest form of support

Source: Samms-Vaughan, M (2018). The Jamaican Child's First 2000 Days How Are We Doing? Results from JAKIDS [Powerpoint Slides]. Received from Prof. Maureen Samms-Vaughan, Principal Investigator of the JA KIDS Study, The University of the West Indies, Mona on November 14, 2018.

Images: www.vecteezy.com



MAKING HEALTH CENTRES ADOLESCENT FRIENDLY

Adolescence is a period characterised by rapid physical, cognitive and social changes, including sexual and reproductive maturation. Adolescents are generally healthy, but their risk-taking behaviours pose challenges to their health and development. Their inherent vulnerability and pressure from some corners of society, including their peers, can lead to the adoption of risky behaviours. Issues, including sexual identity and dealing with sexuality, adds to the dynamism of the period and cannot be overlooked by any service that provides for their need. The period of adolescence poses new challenges to an aging health service and investments must be made if the service is to remain relevant to the young person. The Ministry of Health (MOH) has, therefore, implemented a number of programmes to address these issues.

ADOLESCENT STANDARDS AND CRITERIA

Standards and Related Criteria for Adolescent Health (S&C) were developed as a guide for assuring quality health services for adolescents. The S&C cover areas under service delivery, such as affordability, accessibility, support of client rights, adequate physical and psychosocial assessment, adolescent-centred services and a supportive environment, among others. The S&C are currently being implemented in 18 sites.

St. Ann's Bay, Port Antonio and Sandy Bay are examples of sites which have successfully implemented components of the S&C. Twenty-six (26) new sites have been identified for further roll-out of the standards.

IMPLEMENTATION SITES FOR S&C

Pilot/Roll-Out Sites	Sites Added in 2016
St. Ann's Bay HD	Christiana HC
St. Jago HD	Morant Bay HC
Sandy Bay HC	Darliston HC
Mandeville Adolescent	Port Antonio HD
Health Clinic	
Victoria Jubilee Teen Clinic	Annotto Bay HD
The University Hospital of	Edna Manley HC
the West Indies Teen Clinic	
NFPB Mobile Clinic	Comprehensive HC
Santa Cruz Centre of	May Pen HD
Excellence	
Catherine Hall HC	Albert Town HC

Key: HC – Health Centre; HD – Health Department

ST. ANN'S BAY HEALTH CENTRE WELLNESS CENTRE ESTABLISHED IN JUNE, 2018

- Over 100 teens enrolled
- Service provision have included
rap sessions, skills training, art and
craft activities decoration, make-up
application, and salsa dancing as part
of routine sessions

- Collaboration with School HYPE (Health Youth Positive Energy) initiative

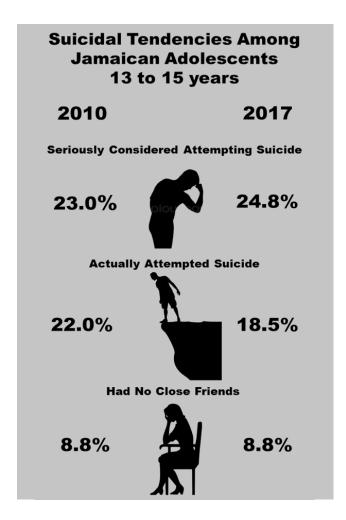
- Quarterly mobile services
- Establishment of Parish Adolescent Health Committees/Advisory Group
- Active involvement of adolescents in the planning of Adolescent-focused services (at least 40% membership in Parish Committees)



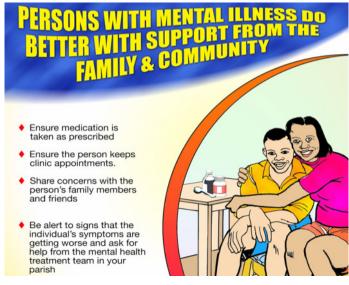


Launch of the Adolescent Wellness Centre. Photo courtesy of Jamaica Observer

MENTAL HEALTH



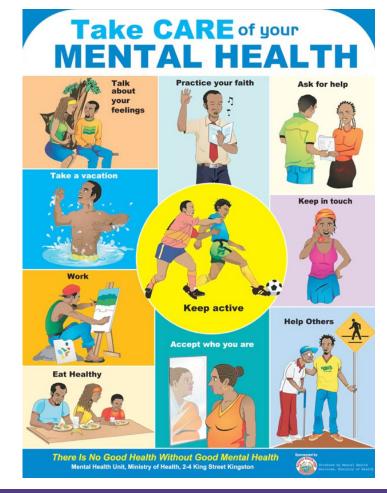
Source: Data from Jamaica, Global School-based Student Health Survey, 2017. Images from www.getdrawings.com, www.clipart-library.com



In 2017, about a quarter (24.8%) of adolescents between 13 and 15 years had seriously considered committing suicide. This was not much higher than the proportion of adolescents 7 years prior in 2010 (23%). More females (31.5%) than males (17.5%) had seriously considered committing suicide and this was also the case in 2010.

Almost one fifth (18.5%) of adolescents had actually attempted suicide in 2017, which was less than those that had done so in 2010 (22%). Similar to the pattern observed in those who considered attempting suicide, there were more females (20.6%) that actually attempted suicide than males (16.1%).

There was no difference in the overall proportion of adolescents who had no close friends in 2017 (8.8%) when compared to those in 2010 (8.8%). In both instances, more males had indicated that they had no close friends.





SUBSTANCE USE

SUBSTANCE USE AMONG JAMAICAN ADOLESCENTS **BETWEEN 13 AND 15 YEARS**





9 Out of 20 Currently Drink Alcohol





3 Out of 20 Currently Smoke Cigarettes





3 Out of 20 Currently Smoke Marijuana

- In 2017, approximately half (45.1%) of adolescents aged 13 to 15 years had at least one drink of alcohol.
- More males (54.8%) were found to have consumed alcohol than females (36.1%).

- 13.1% of youths smoked cigarettes.

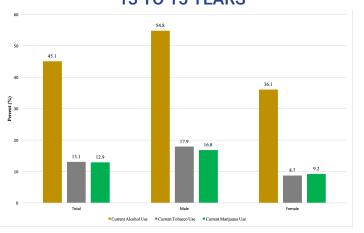
 More males (17.9%) smoked cigarettes than females (8.7%).
 65.6% were exposed to second-hand smoke.

 More males (69.8%) than females (61.7%) were exposed to second-hand smoke.
- 12.9% of youths smoked marijuana.
- More males (16.8%) than females (9.2%) engaged in this activity.

Source: Atkinson, U (2017). The Youth Situation: Findings from the Global School Health Survey & Rapid Situation Assessment.[Powerpoint Slides]. Received from Mrs. Uki Atkinson, Research Analyst. National Council on Drug Abuse on December 29, 2017.

Jamaica, Global School-based Student Health Survey, 2017. (Fact Sheet). Images from: www.vecteezy.com

SUBSTANCE USE AMONG JAMAICANS **13 TO 15 YEARS**

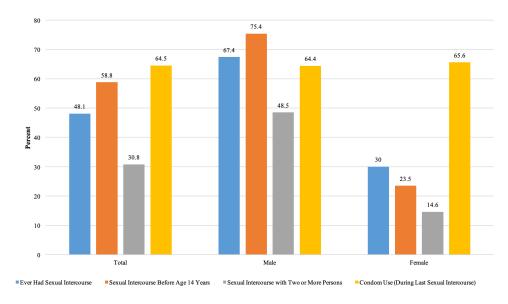




ADOLESCENT HEALTHSEXUAL AND REPRODUCTIVE HEALTH

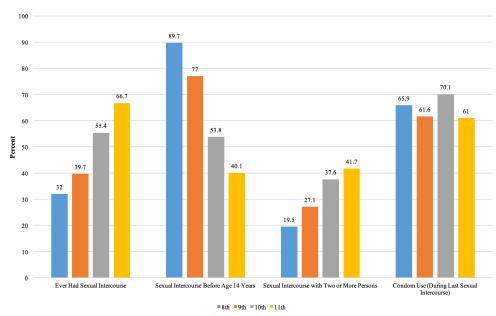
Approximately one half (48.1%) of adolescents 13 to 15 years indicated that they were sexually active, with 58.8% having sexual intercourse before age 14, and 64.5% using condoms. More males than females reported being sexually active (67.4%), having sex before age 14 (75.4%) and having sex with two or more persons (48.5%). However, more females (65.6%) reported using condoms.

SEXUAL AND REPRODUCTIVE HEALTH TRENDS AMONG ADOLESCENTS, 13 TO 15 YEARS, BY SEX, JAMAICA



Reports of ever having sexual intercourse increased with higher grade levels. The proportion reporting sexual intercourse with two or more persons also increased with grade level. Between 61% and 70% of adolescents reported use of a condom at last sexual encounter. A higher proportion of adolescents in lower grades reported having sex before age 14.

ADOLESCENTS 13 TO 15 YRS FOR SEXUAL AND REPRODUCTIVE HEALTH BY GRADE LEVEL



Source: Atkinson, U (2017). The Youth Situation: Findings from the Global School Health Survey & Rapid Situation Assessment. [Powerpoint Slides]. Received from Mrs. Uki Atkinson, Research Analyst. National Council on Drug Abuse on December 29, 2017



PROTECTIVE FACTORS FOR 10 TO 19-YEAR-OLD ADOLESCENTS

According to Wilks et. al (2006) 'resiliency can be defined as any characteristic or factor which protects a person from engaging in risky behaviour. Protective factors include parental and family caring, parental connectedness, parental expectations for school performance and parental availability'. The Youth Risk and Resiliency Behaviour Surveys have indicated the factors which were protective for risk behaviours such as sexual activity, drug use, involvement in fights and physical violence among Jamaican children and adolescents.

PROTECTIVE FACTORS OCCURRING INSIDE AND OUTSIDE THE HOME ASSOCIATED WITH LOWER RISK BEHAVIOURS IN:

ADOLESCENTS 10 - 15 YEARS

Expects you to follow the rules is associated with:

Lower drug use (males).

Is interested in your school work is associated with:

- Lower sexual activity (females)
- Lower drug use (females)
- Lower involvement in fight/attack (females)
- Lower drunkenness (males)

Talks with you about problems is associated with:

- Lower drug use (both sexes)
- Lower involvement in fight/attack (males)

Listens when you have something to say is associated with:

- Lower drug use (both sexes)
- Lower involvement in fight/attack (males)
- Lower drunkenness (males)

Always wants you to do your best is associated with:

- Lower sexual activity (females)
- Lower drug use (males)
- Lower involvement in fight/attack (females)

Believes you will be a success is associated with

- Lower sexual activity (both sexes)
- Lower involvement in fight/attack (both sexes)

ADOLESCENTS 15 - 19 YEARS

Caring relationships in home is associated with:

- Lower sexual activity (males)
- Lower ganja use (both sexes)
- Lower physical violence (females)

High expectations in home is associated with:

- Lower sexual activity (males)
- Higher condom use (both sexes)
- Lower ganja use (both sexes)

Caring relationships outside of home is associated with:

- Lower sexual activity (males)
- Lower ganja use (both sexes)

High expectations outside of home is associated with:

- Lower sexual activity (males)
- Lower ganja use (both sexes)

Someone who you trust is associated with:

Lower ganja use (both sexes)

Source: Data from Jamaican Youth Risk and Resiliency Behaviours Survey, 2005. School-based Survey on Risk and Resiliency Behaviours of 10 - 15 year olds

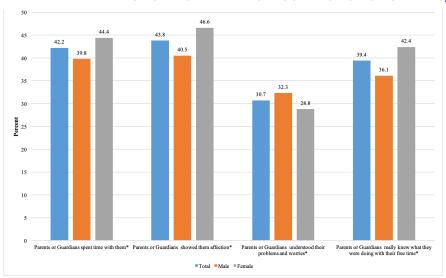
Source: Data from Jamaican Youth Risk and Resiliency Behaviours Survey, 2006. Community-based Survey on Risk and Resiliency Behaviours of 15 - 19 year olds.



ADOLESCENT HEALTH PROTECTIVE FACTORS FOR 10 TO 19-YEAR-OLD ADOLESCENTS

Despite the importance of protective factors in the home, the Global School Health Survey (2017) indicated that less than 50% of adolescents aged 13-15 years reported having a parent or guardian, spending time with them in the past month (42.2%), showing them affection(43.8%), understanding their problems (30.7%) or knowing what they were doing in their free time (39.4%). More females reported having a parent or guardian, spending time with them in the past month (44.4%), showing them affection (46.6%), and knowing what they were doing in their free time (42.4%).

REPORTED PARENTAL RELATIONSHIPS WITH ADOLESCENTS 13 TO 15 YEARS, JAMAICA



*- Always/Most of the time (within the past month before the survey was conducted.

Source: Atkinson, U (2017). The Youth Situation: Findings from the Global School Health Survey & Rapid Situation Assessment. [Powerpoint Slides]. Received from Mrs. Uki Atkinson, Research Analyst. National Council on Drug Abuse on December 29, 2017.

PARENTING TIPS

TEACHING YOUR CHILD RESPONSIBILITY

- Give your child chores to do. This will teach
- him/her responsibility and independence
- Teach him/her to accept responsibility for his/ her improper behaviour and explain to him/her why he/she is being punished for it
- Teach your child proper manners, honesty and how to be respectful to everyone
- Do not allow your child to take gifts, food or rides from strangers.
- Teach your child how to love himself, his/her race/colour and culture
- Make sure that he/she completes his/her tasks/assignment including his/her homework and school projects

IMPROVING YOUR CHILD'S LEARNING

- Join the PTA
- Talk to your child and listen to him/her. Do not shun his/her ideas
- Monitor TV viewing, video/computer/telephone game playing and internet use
- Visit your child's school regularly and not only when there is a problem
- Get to know your child's teachers and peers
- Celebrate your child's achievements and encourage him/her to do better when he/she has failed at a task. Remind him/her that you still love him/her
- Make sure that he/she completes all his/her assignments on time. Help him/her with those he/she is having problems with. DO NOT do them for him/her
- Ensure that your child joins a club or society and participate in extracurricular activities
- Teach your child to respect all persons

Source: Ministry of Education Youth and Culture: https://moey.gov.jm/node/257



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ADOLESCENT HEALTH NUTRITION

During 2017 about 68.4% of adolescents between 13 and 15 years drank carbonated beverages one or more times per day. A greater proportion of males (72%) than females (64.9%) drank carbonated beverages.

About 58.7% of adolescents ate food from a fast food restaurant one or more days per week in 2017. A greater proportion of females (61%) than males (55.9%) ate food from fast food restaurants.



High School Students drink carbonated beverages one or more times per day





High School Students
eat food from a fast food restaurant
one or more days per week

To Eat Healthy, Reduce intake of sugary foods and drinks

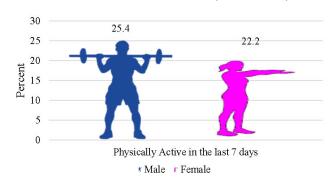
Instead of:	Тгу:
Sweetened beverages, sodas and syrups	Fresh fruit juice, coconut water
Sweets, candies, chocolate	Fresh fruits or vegetables
Cakes, pastries, frosted cereals, sweet biscuits and cookies	Plain biscuits, crackers, plain cereals, nuts, seeds, peas and beans
Ice cream or other desserts	Unsweetened jello, low-fat ice cream, fruits

Source: Atkinson, U (2017). The Youth Situation: Findings from the Global School Health Survey & Rapid Situation Assessment. [Powerpoint Slides]. Received from Mrs. Uki Atkinson, Research Analyst. National Council on Drug Abuse on December 29, 2017. Images from: :http://www.worldartsme.com

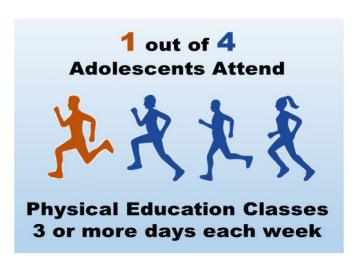


ADOLESCENT HEALTH PHYSICAL ACTIVITY

ADOLESCENT (13 TO 15 YEARS) ENGAGEMENT IN PHYSICAL ACTIVITY BY SEX, JAMAICA, 2017



In the 2017, Global School-based Student Health Survey, 23.8% of Jamaican adolescents between 13 and 15 years were found to have engaged in physical activity for at least 60 minutes per day on all 7 days during the 7 days before the survey was administered. More male (25.4%) were found have engaged in this level of physical activity than females (22.2%)

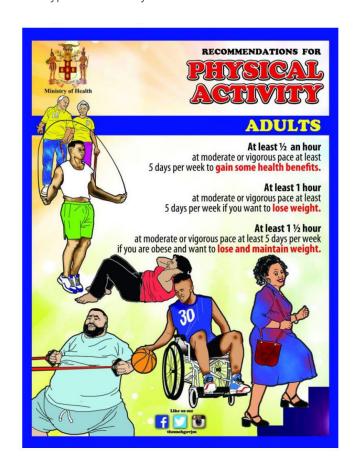


25.2% of Adolescents between 13 to 15 years attended physical education classes three or more days each week. More males (30.5%) than females (20.3%) attended physical education classes three or more days each week.

Source: Jamaica, Global School-based Student Health Survey, 2017 (Fact Sheet). Images from http://worldartsme.com



53.4% of Adolescents spent three or more hours per day sitting and watching television, playing computer games or talking with friends when not in school or while doing homework during a typical or usual day. More females (59.2%) than males (47.1%) expressed this type of sedentary behavior.





CHILD AND ADOLESCENT HEALTH DEATHS 5 TO 19

In 2000, the death rate in the 5 to 19 age group was 38.9 per 100,000 population. Sixteen years later, there was an increase in the death rate to 47.4 per 100,000 population.

The leading causes of death have changed over the 16-year period under review. In 2016, the number 1 and 2 causes of death in children 5 to 19 were assault and transport accidents respectively. *Leukemia and diseases of the blood and blood-forming organs, excluding anaemias*, ranked higher in 2000 than in 2016, moving from position 6 and 8 in 2000 to position 14 and 22 respectively in 2016.

Leading Causes of Death in Jamaicans 5 to 19					
	2000			2016	
	Total Mortality Rate = 38.9			Total Mortality Rate = 47.4	
Rank	Disease/Condition	Mortality Rate	Mortality Rate	Disease/Condition	Rank
1	All other external causes*	6.5	10.3	Assault	1
2	Diseases of the nervous system	2.7	5.3	Transport Accidents	2
3	Neoplasms excluding leukemia	2.0	4.0	Diseases of the nervous system	3
4	Human Immunodeficiency Virus (HIV)	1.1	3.7	All other external causes*	4
5	Pneumonia	1.1	3.1	Neoplasms excluding leukemia	5
6	Leukemia	1.0	2.1	Anaemias	6
7	Anaemias	0.9	1.5	Human Immunodeficiency Virus (HIV)	7
8	Diseases of the blood and blood-forming organs excluding anaemias	0.7	0.9	Pneumonia	12
17	Assault	0.4	0.7	Leukemia	14
24	Transport Accidents	0.2	0.4	Diseases of the blood and blood-forming organs excluding anaemias	22

^{*} All other external causes exclude transport accidents, falls, accidental drowning, exposure to smoke or fire, accidental poisoning, intentional self-harm and assault.

Assault and All other external causes include cases reported by the police but not yet registered by the Registrar General's Department (RGD) for 2016.

Mortality Rate per 100,000 population. Source: Registrar General's Department (RGD).



ADOLESCENT HEALTH BEST PRACTICE: TEEN HUB HALF-WAY-TREE TRANSPORTATION CENTRE

The Teen Hub commenced operation in the Half Way Tree Transportation Centre in April 2017 and was formally launched in November 2017. This initiative was introduced as a response to negative behaviours, such as violence, truancy and risky sexual behaviours of adolescents being reported.

The Teen Hub provides a safe space for young people commuting the Kingston and St. Andrew and St. Catherine Metropolitan Areas to access a number of services. An average of 50 adolescents visit the hub daily. These teens can access the Internet and printers free of cost, to complete school assignments and receive counselling for interpersonal conflicts, stress and symptoms of depression.



Formal launch of Teen Hub, November 28, 2017. Photo courtesy of Jamaica Observer

SERVICES OFFERED

- Health care workers are assigned to conduct mental wellness and sexual and reproductive health clinics.
- Youth Empowerment
 Officers from the Ministry
 of Education, Youth and
 Information conduct
 career counselling and
 other programmes on
 designated days.
- A Clinical Psychologist from the Child Guidance Clinic provides group and individual counselling every Tuesday from 2-5 p.m.
- The National Family
 Planning Board has been
 providing HIV counselling
 and testing since the
 hub's inception. They also
 arrange follow-up for any
 positive results that occur.

REACH

Approximately 4,800 young persons have accessed services from the Hub for the period January to September 2018.

- More than 4,000 have accessed skills-based HIV and pregnancy prevention education.
- 757 [Male 391, Female 366] have received HIV counselling and testing.
- 58 adolescents received mental health therapy.
- 12 adolescent advocates and peer mentors are being trained to generate feedback, provide input and deliver basic information among their peers.

LESSONS LEARNED

- Adolescents are not naturally drawn to health facilities; they require traditional as well as nontraditional approaches to access health care.
- Adolescents' participation is critical in the design, plan and implementation of any programmes that affects them.
- The experience has underscored the need for access to those adolescents below 16 years requiring some services.



BASIC HEALTH INDICATORS FOR CHILDREN

Indicators	Jamaica (Available Year)	Latin America & the Caribbean (Available Year)ª	Barbados (Available Year)	Guyana (Available Year)	Source
Life Expectancy at Birth (years) Total Male Female	76.1 (2017) 73.7 (2017) 78.5 (2017)	75.8 (2017) 72.6 (2017) 78.9 (2017)	75.5 (2017) 73.2 (2017) 77.9 (2017)	66.8 (2017) 64.5 (2017) 69.2 (2017)	PAHO Core Indicators, 2017. Health Situation in the Americas, Page 5
Infant Mortality Rate (per 1,000 live births)	22.2 (2015)	16.1 (2017)	12.9 (2015)	19.8 (2014) ^b	PAHO Core Indicators, 2017. Health Situation in the Americas, Page 6
Neonatal Mortality Rate (per 1,000 live births)	19.7 (2015)	9.9 (2017)	8.0 (2015)	12.1 (2014)	PAHO Core Indicators, 2017. Health Situation in the Americas, Page 6
Under Five Mortality (per 1,000 live births)	23.3 (2015)	19.7 (2017)	14.6 (2015)	22.3 (2014)	PAHO Core Indicators, 2017. Health Situation in the Americas, Page 6

Notes

- Regional aggregates (i.e. 'Latin America and the Caribbean') for rates, ratios and proportions are weighted averages. The publication year for the data source is therefore used as the date for the estimate;
- Data from Guyana presents limitations of one or more of the following: coverage of maternal deaths and live births, differences in the maternal death definition, different denominators used or the analysis of only confirmed maternal deaths;
- For computation of public sector estimates: Physicians = Generalist Medical Practitioners and Specialist Medical Practitioners combined; Nurses = Nursing Professionals
- · and Midwifery Professionals combined.

Source Links:

- Pan American Health Organization (PAHO) Core Indicators, 2017. Health Situation in the Americas. Retrieved at https://www.paho.org/data/index.php/en/indicators.html
- United Nations Development Programme (UNDP), 2016. Human Development Report 2016. Retrieved at http://hdr.undp.org/sites/default/files/2016_human_development_report.pdf or http://hdr.undp.org/en/composite/HDI
- WHO Global Health Observatory data repository Health service coverage: 2017-11-15. Retrieved at http://apps.who.int/gho/data/view.main.1630?lang=en

EDITORIAL STAFF

Editorial Staff:

Dr. Karen Webster-Kerr - Principal Medical Officer, National Epidemiologist

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Mr. Jovan Wiggan - Epidemiological Officer, Biostatistician (Acting), Epidemiological Research and Data Analysis Unit

Dr. Iyanna Wellington - Medical Epidemiologist, National Surveillance Unit

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Mrs. Nicole Martin-Chen – Director, Monitoring and Evaluation Unit

Miss Lesley-Ann James – Surveillance Officer, National Surveillance Unit

Acknowledgements for contributions:

Dr. Julia Rowe-Porter – Programme Development Officer, Family Health Services

Mrs. Joi Chambers - Director, Adolescent Health Services

Miss Monique Lyn Quee - Manager, Civil Registration and Vital Statistics, Registrar General's Department

Prof. Maureen Samms-Vaughan - Principal Investigator, Ja KIDS, University of the West Indies

Mrs. Uki Atkinson – Research Analyst, National Council on Drug Abuse

Miss Romae Thorpe, Statistician, Policy Planning and Development Division

