

## Public Health Situation Analysis N°2: Aftermath of Hurricane Melissa amid energy constrains in Cuba

### Type of Emergency



Aftermath of Hurricane  
Melissa amid energy constrain

### Main Health Threats

- ✓ Water and foodborne diseases
- ✓ Vector-borne diseases
- ✓ Psychosocial conditions
- ✓ Respiratory diseases
- ✓ Non-communicable diseases
- ✓ Human immunodeficiency virus (HIV), tuberculosis (TB), and other chronic infections
- ✓ Neonatal and maternal diseases
- ✓ Violence
- ✓ Malnutrition
- ✓ Immunization and vaccine-preventable diseases
- ✓ Human rabies transmitted by dogs and mongoose

### CONTEXT

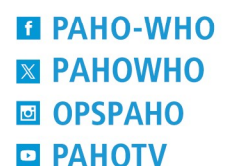
Hurricane Melissa made landfall in southeastern Cuba on 29 October 2025 as a Category 3 hurricane, bringing winds over 195 km/h and rainfall above 400 mm and causing severe flooding, river overflows, and widespread damage to housing and essential infrastructure across Santiago de Cuba, Granma, Holguín, and Guantánamo (1–7). Approximately 735,000 people were evacuated prior to landfall — including elderly individuals, children, people with disabilities, and pregnant women — and more than 3 million people were exposed to hurricane conditions (2,8,9). Although evacuation numbers declined in the following weeks, displacement persisted into mid-December 2025 (10). Over 215,000 homes were damaged and 1,860 educational institutions were affected, while disruptions to health, water, telecommunications, and electricity systems significantly reduced service capacity (10). Power outages constrained water treatment and safe storage, increasing risks of waterborne diseases and limiting the functioning of health facilities (10). Agricultural losses affecting approximately 185,000 hectares and an estimated 40% of national vegetable production further strained food systems (5,9).

These impacts have intensified public health vulnerabilities and service delivery constraints. Cuba relies on food imports for over 80% of its supply, and hurricane-related agricultural losses have reduced domestic production capacity (11,12). Transport limitations and disruptions to the rationing system constrain food access, particularly among vulnerable populations dependent on social protection mechanisms (11,12). Disruptions to water systems increase the risk of waterborne diseases (10), while weakened environmental control conditions may elevate the risk of arboviral transmission. Approximately 5 million people live with chronic illnesses requiring continuous care and medication, including 16,000 patients requiring radiotherapy and 12,400 undergoing chemotherapy (13). Individuals dependent on electrically powered medical equipment or stable cold-chain systems face heightened vulnerability (13). Maternal and child health services have been affected, with more than 32,000 pregnant women facing increased risks due to reduced access to obstetric ultrasounds and limited transportation for obstetric emergencies (14). Delays in routine childhood vaccination schedules place children at increased risk (14). Reduced referral capacity and delays in access to emergency and specialized care further elevate health risks (13).

Since December 2025, limitations in energy availability resulting from reduced fuel supply have introduced additional constraints across multiple sectors (15) which have been intensified since the beginning of 2026. Given Cuba's dependence on imported fuel and centralized distribution systems, energy supply disruptions have affected electricity generation,

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transportation, food production, water supply, and health service delivery (15). Restrictions on high-consumption diagnostic services, including CT scans and certain laboratory technologies, have increased reliance on basic-level care, while mitigation measures such as solar panel installations remain limited in scope (13). Fuel constraints have reduced ambulance services and referral capacity, and public transportation networks have been scaled down, further limiting access to health services and employment (13). Delivery of clean water, medical care, food, and humanitarian assistance has been disrupted in several areas, including provinces still recovering from Hurricane Melissa (15,16). Reduced diesel allocation under the February 2026 Energy Contingency Plan has affected agricultural activity and cold-chain reliability, contributing to spoilage of perishable foods and increased food safety risks (11,12).

Taken together, hurricane-related infrastructure damage and ongoing limitations in energy availability are exerting cumulative pressure on health service delivery, access, and recovery efforts. The overlapping and compounding effects of infrastructure disruption, food insecurity, service constraints, and reduced reliability of energy services have increased the fragility of the public health situation and may heighten risks across vulnerable populations in the months ahead.

## HEALTH STATUS

### Population mortality

In Cuba, an increase in mortality was observed in 2021 in the context of the COVID-19 pandemic, with a crude mortality rate of 15.0 per 1,000 population, according to national statistics (17). In that year, the leading causes of death included heart disease, cancer, influenza and pneumonia, cerebrovascular disease, and COVID-19 (18). Life expectancy at birth showed a temporary reduction during this period, followed by signs of recovery in subsequent years. Infant and maternal mortality also showed variations around 2021, with stabilization observed in more recent data. An overview of mortality indicators is presented in **Table 1** below.

**Table 1. Key Mortality and Life Expectancy Indicators in Cuba**

Mortality Indicators (17–21)	2020	2021	2022	2023	2024	2025	Source
Life expectancy at birth	77.7*	73.2	77.6	78.1	78.3	NA	PAHO/*MOH
Crude mortality rate (per 1000 people)	10.1	15.0	11.3	11.5	12.9	NA	MOH
Infant mortality rate (deaths < 1 year per 1000 births)	4.9	7.6	7.5	7.1	7.1	9.9	MOH
Child mortality rate (deaths < 5 years per 1000 births)	6.2	9.2	9.5	8.8	9.7	NA	MOH
Maternal mortality ratio (MMR)	40	176.6	40.9	38.7	40.6	44.1	MOH

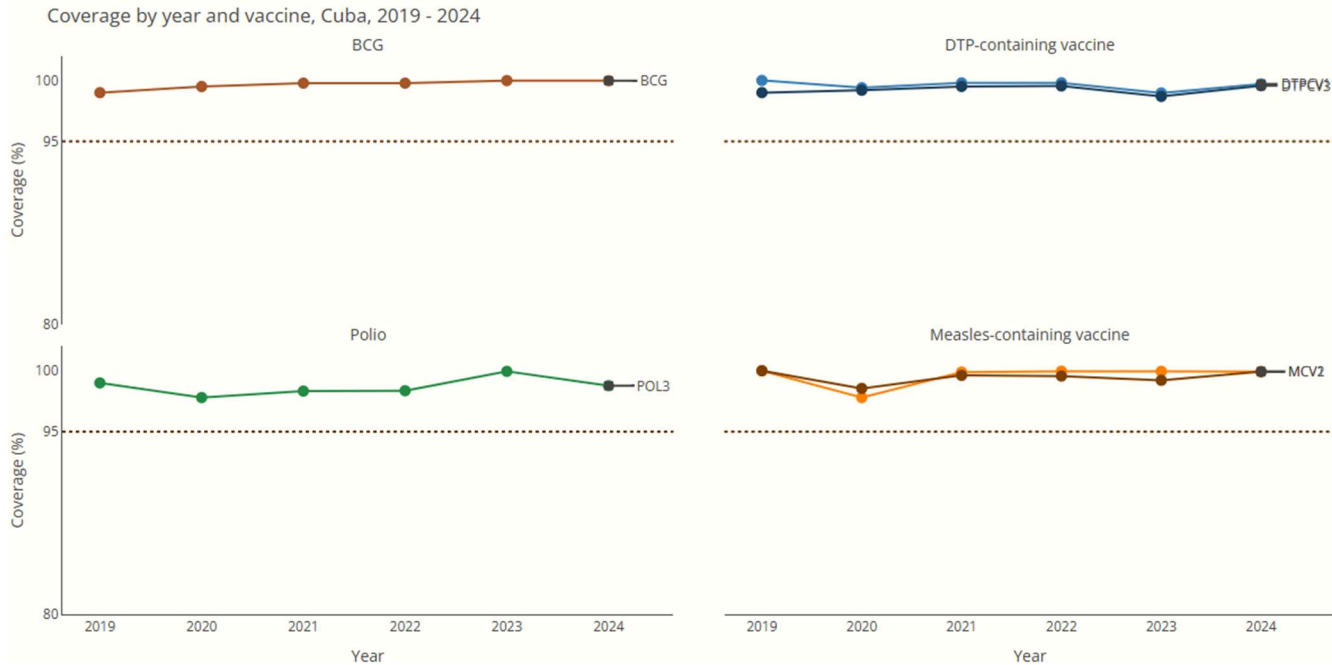
## Vaccination coverage

In Cuba, despite ongoing economic constraints, routine immunization coverage has remained consistently high between 2019 and 2024 (**Table 2 and Figure 1**). National coverage for DTP-containing vaccine (1st dose) ranged from 98.97% to 100%, while DTP3 coverage remained between 98.69% and 99.57%. BCG coverage was sustained between 98.5% and 99.99% throughout the period (20), and measles-containing vaccine coverage (MCV1 and MCV2) remained above 97.8%, reaching nearly 100% in most years. Polio (3rd dose) coverage fluctuated modestly between 97.8% and 99.95%. Although slight declines were observed in 2020 and 2023, coverage levels have remained above the 95% threshold recommended for herd immunity (22).

**Table 2. Coverages rates for routine vaccinations in Cuba.**

Vaccination Indicators (21,22)	2019	2020	2021	2022	2023	2024	Source
DTP-containing vaccine, 1st dose	100%	99.4%	99.8%	99.81%	98.97%	99.71%	PAHO
DTP-containing vaccine, 3rd dose	99%	99.2%	99.51%	99.55%	98.69%	99.57%	PAHO
BCG	99.7%	98.8%	98.8%	99.9%	98.5%	98.8%	MOH
Measles-containing vaccine, 1st dose	100%	97.8%	99.89%	99.96%	99.95%	99.94%	PAHO
Measles-containing vaccine, 2nd dose	100%	98.55%	99.62%	99.57%	99.22%	99.92%	PAHO
Polio, 3rd dose	99%	97.8%	98.33%	98.36%	99.95%	98.77%	PAHO

**Figure 1. Coverages rates for routine vaccinations by year and vaccine 2019-2024. Cuba.**



Source: Pan American Health Organization/World Health Organization. *Immunization coverage throughout the life course in the Americas*. Washington, D.C.; PAHO/WHO: 2024. [cited 27 February 2026]. Available from: <https://paho-cim.shinyapps.io/immunization-dashboard/>

Prolonged shortages of medical supplies, fuel, and electricity, as well as constraints affecting cold chain stability and transportation, pose risks to sustaining these achievements. Even small fluctuations in high-coverage settings may increase vulnerability if compounded by service disruptions, delays in outreach activities, or gaps in subnational access. Continued strengthening of surveillance for vaccine-preventable diseases, protection of cold chain functionality, and sustained support for routine immunization services remain essential to maintaining population immunity and preventing outbreaks.

## HEALTH RISKS

Public Health Threat	Likelihood	Public Health Consequences	Level of Risk	Rationale
Water and foodborne diseases	Highly likely	Major	Very High	Ongoing constraints affecting energy supply in Cuba is disrupting essential water, sanitation, and food systems, increasing the risk of water- and food-borne disease transmission. Interruptions in energy availability affect water supply and treatment operations, as over 80% of pumping systems depend on electricity, limiting access to safe drinking water and compromising hygiene conditions. Limitations in fuel availability further restrict trucked water distribution and food transport, reducing access to essential goods and weakening contingency response capacity (12). These risks are compounded by the residual effects of Hurricane Melissa, which damaged water and sanitation infrastructure, contaminated water sources, and displaced thousands of people. Leptospirosis, endemic in Cuba, represents an additional concern, particularly in flood-affected and displaced populations. However, current shortages of fuel, rodenticides, medicines, and operational supplies are constraining environmental sanitation, waste management, and rodent control efforts, further elevating public health risk (23,24).
Vector-borne diseases	Highly likely	Major	Very high	Disruptions to routine vector surveillance and control activities, reduced access to health services, and environmental conditions favorable to mosquito breeding may increase the risk of vector-borne disease outbreaks in Cuba. No locally acquired malaria cases have been reported in recent years, and surveillance remains ongoing (25). Since July 2025, 51,217 suspected chikungunya cases (1,959 confirmed and 46 deaths) have been reported across 13 provinces (26). Cuba maintains active dengue transmission, mainly associated with DENV-3 and DENV-4 (27,28). Between EW 1 and EW 4 of 2026, a total of 114 confirmed chikungunya cases and 2 associated deaths have been reported (29). Dengue transmission remains sustained, with 30,692 suspected cases reported in 2025 (441 confirmed, 19 deaths), and continued cases reported in early 2026 (28). The circulation of multiple dengue serotypes and the presence of <i>Aedes aegypti</i> , combined with post-hurricane conditions, may support ongoing transmission. Additionally, between EW 1 and EW 29 of 2025, 28 laboratory-confirmed Oropouche cases were reported across several provinces, including four cases with neurological complications, raising concern given the recent introduction of the virus and a largely susceptible population (30).
Mental and Psychosocial conditions	Highly likely	Moderate	High	The current context has significant impacts on livelihoods, food security, access to basic medicines, alongside potential displacement, and other stressors, which may trigger acute distress and exacerbate pre-existing mental health conditions, particularly where access to healthcare services is disrupted. Recurrent emergencies, including Hurricanes Oscar (October 2024), Rafael (November 2024), and Melissa (October 2025), as well as earthquakes and severe flooding, have caused extensive destruction, displacement, and livelihood losses (23). These events exacerbate stress, anxiety, depression, and post-traumatic stress disorder (PTSD), particularly in communities already affected by food insecurity, disrupted healthcare services, and deteriorating living conditions (31). In Cuba, mental health stigma remains widespread at the community level, often discouraging individuals from seeking professional support (32). In 2021, the total burden of mental

				disorders in Cuba was estimated at 2,250.66 DALYs per 100,000 population, with 2,230.57 YLDs per 100,000 (33). In 2024, the age-standardized suicide mortality rate was 9.4 per 100,000 population (20)
Respiratory diseases	Highly likely	Moderate	High	Acute respiratory infections remain among the leading reported syndromes in Cuba, with expected increases linked to climatic variations and population mobility (34). As of EW 4 2026, influenza and RSV activity in Cuba have increased in recent weeks, with positivity rates of 8.3% and 14.2%, respectively, while SARS-CoV-2 circulation remains low and stable. Influenza A(H1N1)pdm09 is the predominant subtype. (35). The rise in respiratory virus circulation, combined with seasonal factors, population mobility, overcrowding, and constraints affecting infrastructure and service delivery may increase transmission and place additional pressure on health services (34).
Non-communicable diseases (NCDs)	Highly likely	Moderate	High	In 2021, NCDs accounted for 61.1% of all deaths in Cuba, with COVID-19, ischemic heart disease, and stroke representing the leading causes of death in the country (19,36). Between 2000 and 2021, NCD mortality increased substantially, reaching 923.6 deaths per 100,000 population, while the overall NCD burden rose to 29,475.7 DALYs per 100,000 population, reflecting a sustained and growing chronic-disease burden within an aging population (37). Hypertension affects 39.9% of adults aged 30-79 years, with treatment coverage (60.6%) among the best in the Region of the Americas (38). Obesity (BMI $\geq 30$ kg/m <sup>2</sup> ) affects 21.8% of adults, while adult tobacco use has declined to 24.2% (39,40). An estimated 5 million people require long-term care for chronic conditions in the country. Intermittent energy supply, restrictions on energy-intensive diagnostics, fuel shortages, and constraints in medical supplies have disrupted chronic disease management nationwide. These disruptions particularly affect patients dependent on continuous treatment and increase the risk of preventable complications and excess mortality among populations living with NCDs (13).
Human immunodeficiency virus (HIV), and tuberculosis (TB),	Likely	Moderate	High	Cuba's tuberculosis (TB) estimates in 2024 indicate an incidence rate of 11.4 per 100,000 population, with new and relapse cases notified at 9.6 per 100,000 population. The estimated number of TB deaths was 98, representing an increase compared with previous years (41). For HIV, 97.3% of people living with HIV were receiving antiretroviral therapy (ART) in 2024, corresponding to 28,446 individuals on treatment. The rate of new HIV diagnoses was approximately 0.18 per 1000 population, and the HIV/AIDS mortality rate was 2.9 per 100,000 population (20,42). Ongoing economic constraints, energy supply disruptions, and supply chain limitations pose risks to diagnostic capacity, treatment continuity, and preventive services, potentially increasing the risk of service interruption, drug resistance, and morbidity if sustained.
Neonatal and maternal diseases	Highly likely	Moderate	High	Cuba maintains one of the lowest maternal and neonatal mortality rates in the Caribbean. The maternal mortality ratio was 44.8 deaths per 100,000 live births in 2024, showing a slight increase compared with 2023 (19). The infant mortality rate was 7.1 per 1,000 live births, and neonatal mortality reached 4.2 per 1,000 (19). In the current context, prolonged energy supply interruptions, shortages of medicines and medical supplies, and limited transportation capacity are constraining obstetric and neonatal services. More than 32,000 pregnant women face increased risks due to reduced access to diagnostic and emergency care. Neonatal care is particularly sensitive to electricity instability, as incubators, ventilation systems, and other life-support equipment depend on a reliable power supply, and continued disruptions may threaten to reverse hard-won gains in

Violence (including gender-based violence)	Likely	Moderate	High	maternal, neonatal, and infant health outcomes (14). Historically, the homicide mortality rate in 2020 was 4.8 per 100,000 population, while the burden of non-fatal interpersonal violence reached 307.3 DALYs per 100,000 population (43,44). Among ever-partnered women interviewed in ENIG-2016, 26.7% reported having experienced some form of violence in the past 12 months (45). In the current, limited access to essential goods and services, including food and safe water, may exacerbate stress and social tensions within communities (46). There have already been reported civic unrest driven by blackouts, shortages, and service collapse in 2025 (47). During such periods of hardship, incidents of gender-based and domestic violence tend to increase, as women often bear the main responsibility for securing food and water for their families (48).
Malnutrition	Highly likely	Moderate	High	Child health indicators in Cuba remain relatively low in the regional context but show signs of gradual deterioration. Nutritional indicators in Cuba remain relatively favorable but show persistent vulnerabilities. According to national statistics, approximately 7–8% of newborns are born with low birthweight, a key proxy of early-life nutritional risk. While this level is lower than in many countries in the region, it reflects ongoing challenges related to maternal health, nutrition, and broader socioeconomic conditions (21). The current food insecurity context, characterized by dependence on food imports (>80%), reduced agricultural production, fuel shortages, cold-chain disruptions, food inflation exceeding 200%, interruptions in the regulated food basket, and widespread power outages, has constrained dietary diversity and safe food utilization (11). Successive hurricanes in 2024 (Hurricane Oscar) and 2025 (Hurricane Melissa) further damaged crops and food systems, including significant vegetable production losses (23,49). The convergence of economic stress, supply chain disruptions, and climate shocks increases the risk of worsening maternal and child malnutrition.
Human rabies	Likely	Major	High	Cuba remains endemic for canine rabies, with human cases reported annually (2020–2024) and continued circulation in dogs, cats, and mongooses, sustaining a high risk of exposure amid ~20,000 animal bite/scratch incidents reported each year, disproportionately affecting children (50–52). During hurricanes and major flooding, increased contact between domestic animals and wildlife (including mongooses), pet abandonment, and stress-related aggression during rescue can increase bite/scratch events and the need for rapid risk assessment and timely PEP, underscoring the importance of risk communication on bite prevention and management (53–55).
Vaccine-preventable diseases	Likely	Minor	Moderate	Routine immunization coverage remained high between 2019 and 2024 (98–100% across major antigens) (22). The last confirmed case of measles in Cuba occurred in 2019. Meningitis cases have remained low and fluctuating historically, Cuba reported 17 cases of meningitis in 2017 (56). The ongoing energy supply disruptions poses operational risks to sustaining coverage, including cold-chain instability, transportation constraints, and service disruptions. Localized immunity gaps could emerge in areas affected by service interruptions, increasing vulnerability to measles, meningitis, and other vaccine-preventable diseases.

**Red: Very high risk.** Could result in high levels of excess mortality/morbidity.  
**Orange: High risk.** Could result in considerable levels of excess mortality/morbidity.  
**Yellow: Moderate risk.** Could make a minor contribution to excess mortality/morbidity.  
**Green: Low risk.** Unlikely to make a contribution to excess mortality/morbidity.  
**Grey:** No plausible assessment can be made at this time.

## DISEASE SUMMARIES

### Water and foodborne diseases

Ongoing constraints affecting energy supply are disrupting essential services that underpin safe water, sanitation, and food systems. Interruptions in energy availability affect water supply operations, where more than 80% of pumping equipment depends on electricity, restricting access to safe drinking water and compromising sanitation and hygiene conditions (12). In previous disruptions, water shortages were mitigated through trucked distribution; however, current imitations in fuel availability and rationing efforts reduce this response capacity. Similar constraints are expected in the transport of food into cities and towns, as reduced fuel availability restricts trade and access to essential goods. Interruptions in electricity also affect water treatment, sanitation services, and food preparation, increasing the risk of water and food-borne illnesses transmission.

These risks are compounded by the residual effects of Hurricane Melissa, which damaged water and sanitation infrastructure and displaced thousands of people for several weeks. Flooding affected clean water sources, and hundreds of families remained in shelters requiring ongoing WASH support, disease surveillance, and psychosocial services. Overcrowding in family and friends homes while affected households are rebuilt, and possible future displacement due to the ongoing crisis, along with a lack of clean water and sanitation services has a high chance of leading to contamination of existing reserves of potable water and of causing outbreaks of water and foodborne diseases, commonly manifesting as diarrheal disease (10).

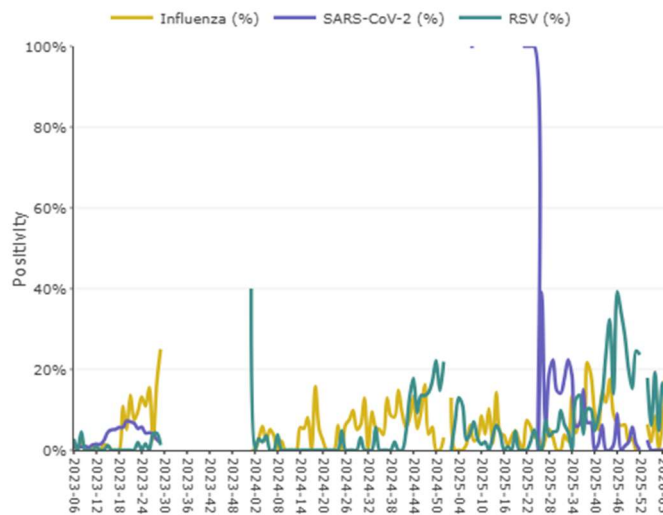
According to the most recently available data, 88% of Cuba's population has access to basic water services for consumption; 74% have access to safely managed sanitation; 18% lack access to piped water; and 70% have access to basic hygiene services (57,58). The number of Disability-Adjusted Life Years (DALYs) due to diarrheal disease is high in Cuba, at 13,527 years lost (59).

Cuba is endemic for leptospirosis and reports incident cases of the infection almost every year. Environmental sanitation actions and the safe disposal of solid waste, especially in shelters and displacement camps, are fundamental to preventing the migration and proliferation of rodents in these areas, contributing to the reduction of the risk of leptospirosis transmission. The adoption of measures, including sealing possible access points, removal of debris, and proper waste management, must be implemented. The current emergency, where the limited fuel, rodenticides, medicines, and other supplies hinder the implementation of these necessary public health activities.

### Respiratory diseases

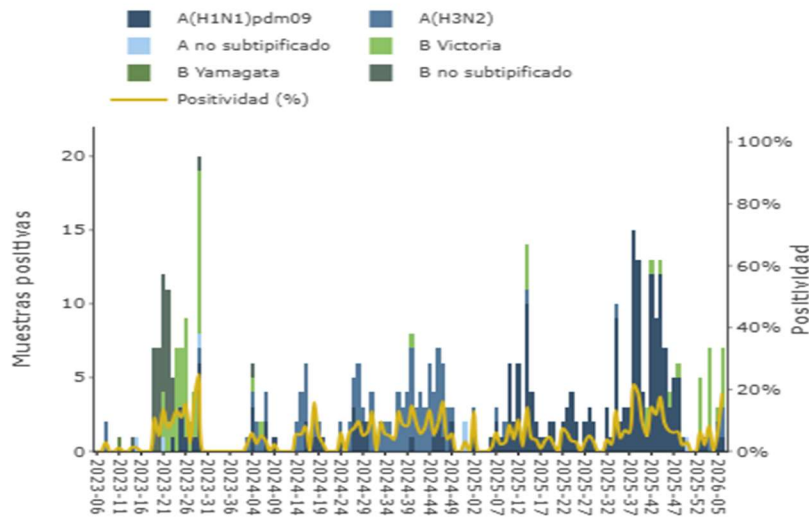
As of epidemiological week (EW) 4, influenza activity in Cuba has increased in the past four weeks, with a reported positivity rate of 8.3%. Respiratory syncytial virus (RSV) activity has also risen during the same period, reaching a positivity rate of 14.2%. SARS-CoV-2 circulation remains low and stable (**Figure 2**). Among influenza viruses detected, influenza A(H1N1)pdm09 predominates, accounting for 49.7% of subtyped cases, followed by influenza A(H3N2) (24.2%) (**Figure 3**) (35).

**Figure 2. Influenza, SARS-CoV-2, RSV, and other respiratory viruses positivity rate by epidemiological week. Cuba 2023-2026.**



Source: Adapted from the Pan American Health Organization. Influenza, SARS-CoV-2, RSV, and other respiratory viruses situation dashboard – Region of the Americas. Washington, D.C.: PAHO; 2026 [cited 25 February 2026]. Available from: [https://dashboards.pahoflu.com/app/respiratory\\_viruses/](https://dashboards.pahoflu.com/app/respiratory_viruses/)

**Figure 3. Influenza samples, positivity and circulating viral characteristics by epidemiological week. Cuba 2023-2026.**



Source: Adapted from the Pan American Health Organization. Influenza, SARS-CoV-2, RSV, and other respiratory viruses situation dashboard – Region of the Americas. Washington, D.C.: PAHO; 2026 [cited 25 February 2026]. Available from: [https://dashboards.pahoflu.com/app/respiratory\\_viruses/](https://dashboards.pahoflu.com/app/respiratory_viruses/)

Due to the prioritization of emergency management efforts in the country, the surveillance of diseases caused by respiratory viruses can be compromised, resulting in gaps in monitoring epidemiological changes and viral circulation trends. This hinders the assessment of transmission patterns, clinical severity, and the impact on the health system, as well as making it difficult to identify risk groups susceptible to developing respiratory complications.

## Vector-borne diseases

Disruptions to routine vector surveillance and control activities in several severely affected areas, the temporary suspension or reduced availability of routine medical services, and environmental conditions favorable to vector breeding may increase the risk of outbreaks of vector-borne diseases. These risks are compounded by challenges in waste management, water storage practices, and intermittent service provision, which can create additional mosquito breeding sites.

Cuba has not reported locally acquired **malaria** cases in recent years, and malaria continues to be monitored through ongoing laboratory and syndromic surveillance systems.

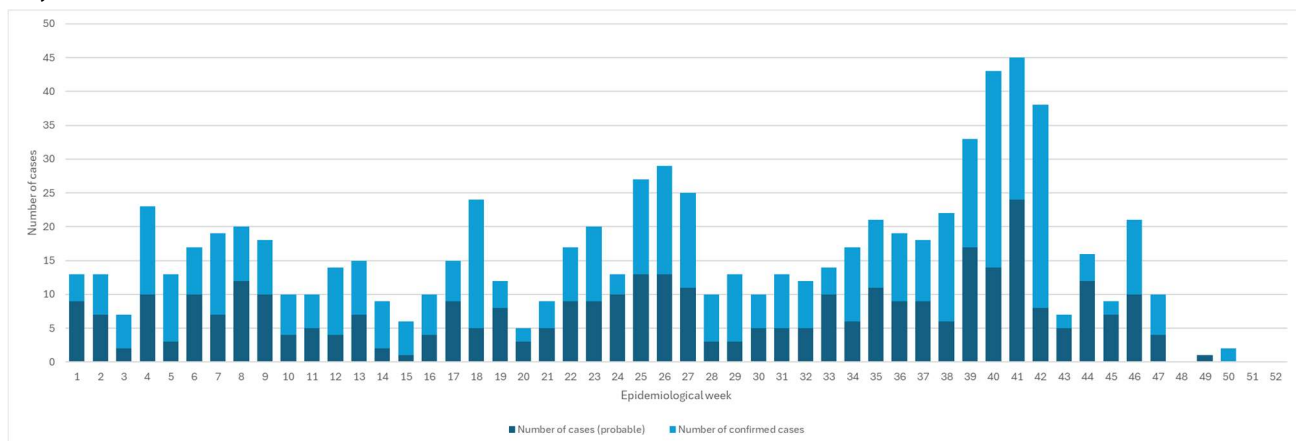
Since the onset of the **chikungunya** outbreak in July 2025 and as of epidemiological week (EW) 53, a total of 51,217 suspected cases have been reported, including 1,959 laboratory-confirmed cases and 46 deaths. Cases have been identified in 13 of the country’s 15 provinces: Artemisa, Camagüey, Ciego de Ávila, Cienfuegos, Granma, Guantánamo, Holguín, Havana, Matanzas, Pinar del Río, Sancti Spíritus, Santiago de Cuba, and Villa Clara (26). Between EW 1 and EW 4 of 2026, a total of 1,457 suspected chikungunya cases have been reported, including 114 confirmed cases and 2 associated deaths (29).

Cuba continues to report sustained **dengue** circulation with moderate transmission intensity, predominantly associated with serotypes DENV-3 and DENV-4. Between EW 1 and EW 52 of 2025, 30,692 suspected dengue cases were reported. Of the total number of cases reported, 441 were confirmed (**Figure 4**), including 19 deaths, corresponding to an incidence rate of 281 per 100,000 population and a case fatality rate of 0.062%. Of the total number of reported cases, 2.5% (n=770) were severe dengue

cases (8). During 2025, three dengue virus serotypes (DENV-2, DENV-3, and DENV-4) were identified (28).

Between EW 1 and EW 2 of 2026, 202 suspected **dengue** cases have been reported, with no associated deaths. Of these, 10.4% (n=21) were classified as severe dengue. Cases were recorded in 10 provinces (28).

**Figure 4. Number of suspected and confirmed dengue cases in Cuba by epidemiological week of symptom onset and year, between EW 1 of 2025 and EW 53 of 2025.**



Source: Adapted from Pan American Health Organization/World Health Organization. Epidemiological Update: Dengue in the Americas Region. 18 February 2026. Washington, D.C.; PAHO/WHO: 2026. Available from: <https://www.paho.org/en/documents/epidemiological-update-denque-americas-region-18-february-2026>.

The presence of *Aedes aegypti* mosquitoes and favorable post-hurricane environmental conditions may support continued low-level transmission in the subregion (29,60).

Recent outbreaks of **Oropouche** virus disease have been reported in several South American countries and, most recently, in Cuba. Between 2024 and 2025, Cuba reported its first detection of Oropouche virus in the country. The spread of this arbovirus in a new area with an environment conducive for rapid spread, as well as an immunologically naïve population, is a cause for

concern (60).

Between EW 1 and EW 29 of 2025, 28 laboratory-confirmed **Oropouche** cases were reported. Cases were distributed across the provinces of Pinar del Río (6 cases), Villa Clara (5), Guantánamo (4), Havana (3), Matanzas (3), Artemisa (2), and one case each in Cienfuegos, Ciego de Ávila, Camagüey, Las Tunas, and Santiago de Cuba. Of confirmed cases, 71% (n=20) were female and 28% (n=8) male, and 96% (n=27) occurred among individuals aged 0–54 years. Four confirmed cases presented neurological complications, including three cases of meningoencephalitis and one case of encephalitis (30).

## Immunization and vaccine-preventable diseases

Between 2019 and 2024, routine immunization coverage in Cuba remained consistently high across major antigens (DTP1, DTP3, POL3, MCV1, MCV2, and BCG), generally ranging between 98–100% (**Table 2 and Figure 1**). Minor declines were observed in 2020 and again in 2023 for some antigens, such as DTP3 and MCV2, but coverage remained above the 95% threshold recommended for herd immunity, with recovery noted in 2024. This profile suggests limited national-level immunity gaps overall (22).

The last confirmed case of measles in Cuba occurred in 2019. Reported meningitis cases in Cuba fluctuated between 3 and 19 annually from 2007 to 2017, with peaks in 2015 (19 cases) and 2017 (17 cases), indicating periodic increases rather than a sustained upward trend (56).

In the context of the ongoing constraints affecting energy availability and service delivery in Cuba, maintaining strong national immunization coverage faces increasing operational pressures, including recurrent power outages affecting cold-chain stability, transportation constraints limiting outreach activities, shortages of medical supplies, and reduced service hours in some facilities. While national coverage for key antigens remains high, localized service disruptions and delays in routine vaccination may create subnational immunity gaps. In densely populated urban areas and settings with constrained access to water, sanitation, and health services, even small declines in coverage could increase the risk of transmission of measles, meningitis, and other vaccine-preventable diseases.

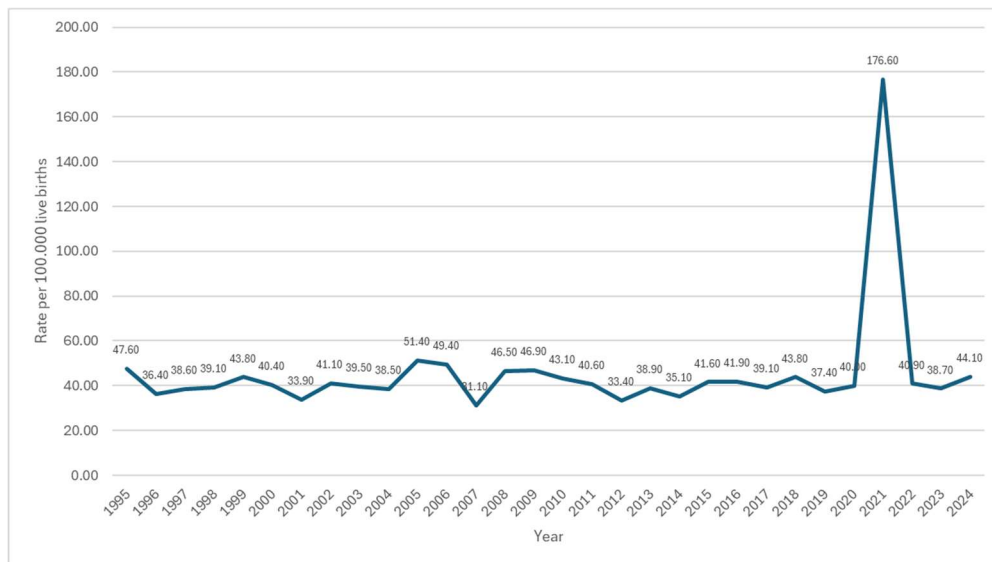
## Maternal and neonatal health

Both maternal and neonatal mortality can be significantly affected in emergency situations. Compromised health infrastructures, population displacement, and the interruption of essential services can reduce the capacity to provide adequate obstetric and neonatal care. Even in areas where prenatal services were previously available, the rate of inadequate follow-up often increases during disasters, while physical and psychological stress contributes to higher obstetric complications and perinatal risk (57).

Maternal and neonatal health in Cuba is increasingly vulnerable in the context of ongoing constraints affecting energy availability and essential service continuity. Prolonged power outages, shortages of medical supplies and reagents, and limited transportation capacity are constraining the provision of essential obstetric and neonatal services. More than 32,000 pregnant women reportedly face heightened risks due to reduced access to obstetric ultrasounds and delays in the timely diagnosis of congenital anomalies, as well as difficulties in accessing emergency referral care. These disruptions affect the continuity and quality of prenatal follow-up and may increase the risk of preventable obstetric complications (14).

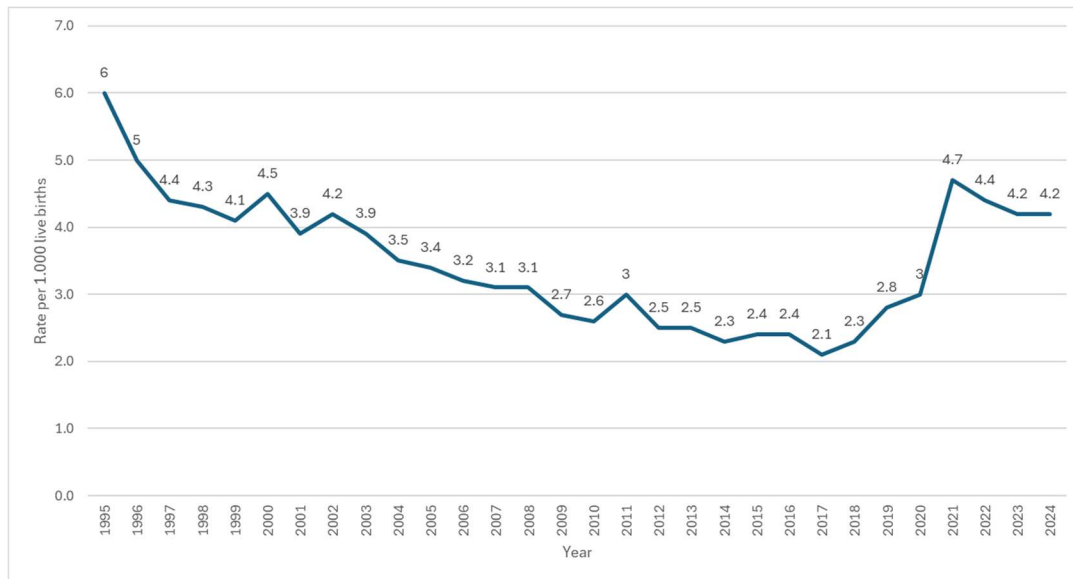
Cuba has historically maintained comparatively low maternal and neonatal mortality rates through a comprehensive, multisectoral maternal and child health program characterized by near-universal skilled birth attendance and strong primary care coverage. Maternal mortality has fluctuated over the past three decades, generally remaining between 30 and 50 deaths per 100,000 live births, with a marked peak in 2021 (176.6 per 100,000) at the expense of maternal mortality from indirect causes related to the Covid-19 epidemic (**Figure 5**). The Anuario Estadístico de Salud 2024 reports that most maternal deaths were associated with hypertensive disorders, obstetric hemorrhage, and sepsis, mainly in the provinces of Havana, and Mayabeque (20). Neonatal mortality has shown a long-term decline from 6.0 per 1,000 live births in 1995 to around 2.1–2.5 in the mid-2010s, but has increased in recent years, reaching 4.2 per 1,000 live births in 2024 (**Figure 6**). Sustained interruptions in electricity, reduced availability of medicines and consumables, and constraints in hospital operations, including operating rooms and intensive care units, pose risks to sustaining these indicators. Neonatal care is particularly sensitive to power instability, as incubators, ventilation systems, and other life-support equipment depend on a reliable electricity supply (19).

**Figure 5. Maternal mortality per 100,000 live births in Cuba, 1995-2024**



Source: Adapted from Pan American Health Organization/World Health Organization. Core indicators dashboard. Washington, D.C.; PAHO/WHO: 2026. [cited 27 February 2026] Available from: <https://opendata.paho.org/en/core-indicators/core-indicators-dashboard>

**Figure 6. Neonatal mortality per 1,000 live births in Cuba, 1995-2024**



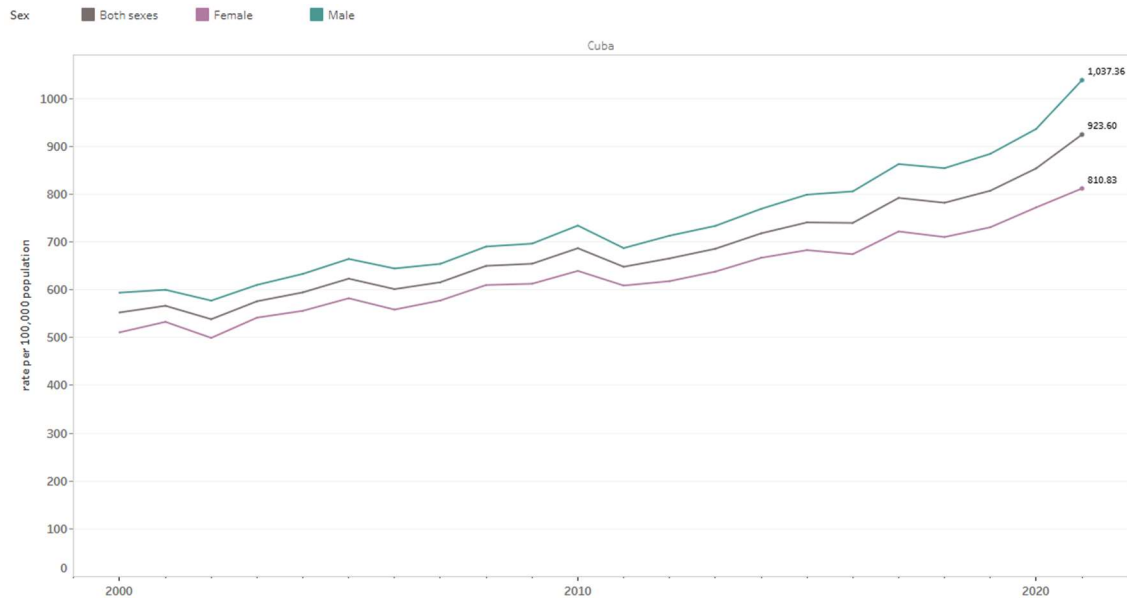
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In addition, delays in routine childhood vaccination schedules and service disruptions place vulnerable newborns and infants at greater risk, particularly the approximately 61,830 children with special health care needs who depend on home ventilation, mechanical suction, or climate-controlled environments. Maintaining continuity of maternal, neonatal, and pediatric services amid ongoing system-wide constraints remains critical to preventing reversals in hard-won health gains (14).

## Non-communicable diseases (NCDs)

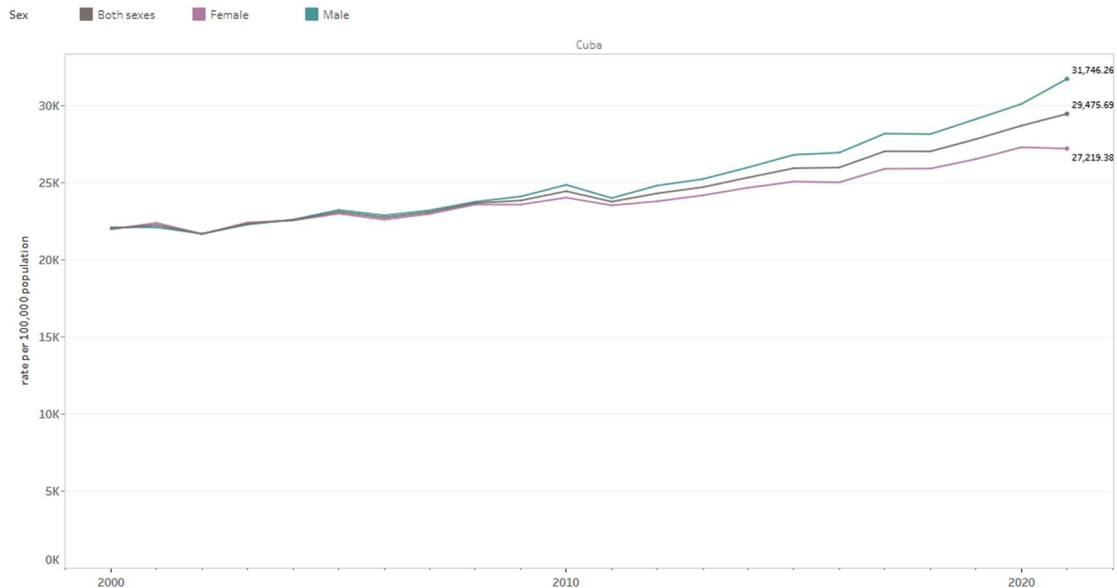
In **Cuba**, noncommunicable diseases (NCDs) are the dominant drivers of mortality and disability, consistent with the broader epidemiological transition observed in the Americas. Between 2000 and 2021, NCD mortality rates in Cuba increased steadily, rising from approximately 550 to 923.6 deaths per 100,000 population (**Figure 7**). A similar upward trend was observed in disability-adjusted life years (DALYs), which increased from about 22,000 to 29,475.7 per 100,000 over the same period (**Figure 8**). These sustained upward trends reflect a growing burden of premature mortality and years lived with disability attributable to chronic conditions over the past two decades (37). The leading contributors to this burden include COVID-19, ischemic heart disease, and stroke (36).

**Figure 7. Trend of noncommunicable diseases deaths from 2000 to 2021 – Rates per 100,000 population by sex, in Cuba**



Source: Adapted from Pan American Health Organization/World Health Organization. *The burden of noncommunicable diseases*. Washington, D.C.; PAHO/WHO: 2026. [cited 27 February 2026] Available from: <https://www.paho.org/en/enlace/burden-noncommunicable-diseases>

**Figure 8. Trend of noncommunicable diseases Disability-Adjusted Life Years (DALYs) from 2000 to 2021 – Rates per 100,000 population by sex, in Cuba**



Source: Adapted from Pan American Health Organization/World Health Organization. *The burden of noncommunicable diseases*. Washington, D.C.; PAHO/WHO: 2026. [cited 27 February 2026] Available from: <https://www.paho.org/en/enlace/burden-noncommunicable-diseases>

Cardiovascular and metabolic risk factors remain highly prevalent and have increased over time. Hypertension affects an estimated 39.9% (95% CI: 30.9%–49.4%) of adults aged 30–79 years, rising from about 34.9% in 1990 to nearly 40% in the most recent estimate (38). Overweight and obesity have also shown a marked upward trend, increasing from approximately 7.1% in 1990 to 21.8% (95% CI: 19.0%–24.7%) in 2022 among adults (39). Tobacco use among adults aged 15 years and older has declined substantially since 2000, from around 48% overall to 35.8% in 2010 and an estimated 24.2% in 2025, but projections indicate that the country is unlikely to achieve the targeted 30% relative reduction in tobacco use by 2025 (40). Together, these trends highlight a sustained NCD risk profile in the country.




In the context of the ongoing constraints affecting energy availability and service delivery, Cuba’s high NCD burden poses increasing systemic risks. Restrictions affecting energy-intensive diagnostics such as CT scans and some laboratory services have increased reliance on basic-level care, while mitigation measures such as solar panels remain limited in coverage. Approximately 5 million people live with chronic conditions requiring continuous treatment, including around 16,000 cancer patients needing radiotherapy and 12,400 requiring chemotherapies. Patients dependent on uninterrupted electricity for dialysis, oxygen therapy, or medication refrigeration are particularly vulnerable, and limitations in fuel availability have further disrupted ambulance and referral services. Service restrictions, supply constraints, and transport disruptions heighten the risk of preventable complications and excess mortality, underscoring the need to protect continuity of care and ensure reliable energy and medicine supply for chronic disease management (13).

## Human immunodeficiency virus (HIV) and tuberculosis (TB)

In 2024, Cuba reported 1,955 new HIV diagnoses, with men continuing to account for a higher proportion of new cases

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compared with women. HIV prevention services have expanded notably in recent years. The number of people receiving pre-exposure prophylaxis (PrEP) increased substantially, reaching 3,998 individuals in 2024, compared with minimal uptake prior to 2022. Treatment coverage has also improved steadily: the percentage of people living with HIV receiving antiretroviral therapy (ART) increased from 80.6% in 2016 to 97.3% in 2024 (42). A total of 28,446 people were receiving ART in 2024, and nearly all were on dolutegravir (DTG) or other second-generation integrase inhibitor–based regimens, reflecting alignment with recommended treatment protocols (42,62).

The age-adjusted HIV/AIDS mortality rate was approximately 2.95 per 100,000 population in 2021, with substantially higher mortality among men (4.73 per 100,000) compared with women (1.18 per 100,000) (19).

Regarding tuberculosis, Cuba had an estimated TB incidence rate of 11.4 cases per 100,000 population in 2024, while the notification rate for new and relapse cases was 9.6 per 100,000 population, representing a 41% increase compared with the previous year. After a period of decline between 2018 and 2021, TB incidence began to increase in 2022 and continued rising through 2023 and 2024, indicating a recent upward trend. The estimated total number of TB deaths in 2024 was 98, also reflecting a worsening trend, with the number of deaths approximately doubling since 2022 (41).

Drug-resistant TB remains present in relatively low absolute numbers but shows a gradual increase. In 2024, the estimated proportion of MDR/RR-TB was approximately 28.7% among previously treated pulmonary bacteriologically confirmed cases and 3.1% among new cases, both higher than in earlier years. The estimated number of incident MDR/RR-TB cases reached approximately 60 in 2024, continuing this upward trajectory. TB preventive treatment, which declined in 2020, has progressively recovered in subsequent years, including among people living with HIV and household contacts, reaching higher levels again in 2024 (41).

In the current context, recurrent power outages, limitations in fuel availability, and supply chain constraints can affect laboratory diagnostics, cold-chain maintenance, medication distribution, and continuity of care for chronic infections. Transportation shortages further hinder the operational and programmatic activities of health workers, including monitoring and evaluation, case and contact investigations, and patients' ability to attend medical appointments.

Disruptions in ART or TB treatment adherence could increase the risk of treatment failure, drug resistance, HIV/TB co-infection, and related mortality. In addition, reduced access to preventive and outreach services may limit early diagnosis and weaken control efforts, particularly among vulnerable populations, potentially contributing to further increases in incidence if system pressures persist.

## Malnutrition and child health

Child health indicators in Cuba remain relatively stable and comparatively low in the regional context, though some fluctuations have been observed in recent years. In 2024, the infant mortality rate was 7.1 per 1,000 live births, while the under-five mortality rate reached 9.7 per 1,000 live births, showing a gradual increase compared with pre-2020 levels. Neonatal mortality was 4.2 per 1,000 live births in 2024, accounting for a substantial proportion of infant deaths. A total of 508 infant deaths were reported in 2024, including 300 neonatal deaths. Fetal mortality was 7.6 per 1,000 births in 2024 (19).

In 2021, 1.0% of under-five deaths were attributed to infectious intestinal diseases and 12.1% to acute respiratory infections, highlighting the continued contribution of communicable conditions to child mortality (19).

Nutritional indicators suggest moderate but persistent challenges. In 2024, 7.3% of children under five were stunted, and 7.6%

of newborns had low birthweight (<2,500 g), reflecting nutritional and maternal health vulnerabilities. Exclusive breastfeeding under six months was reported at 40.7% in 2019 (19). No deaths from diphtheria, pertussis, tetanus, or measles in children under five were reported during the period shown, consistent with sustained high immunization coverage (19).

Disruptions to Cuba's longstanding maternal and child health program, historically central to maintaining low infant mortality rates, raises concerns about potential setbacks in maternal and neonatal outcomes. Variations in routine childhood vaccination schedules have been observed in recent years. At the same time, children with special health care needs, particularly those requiring continuous medical support, require sustained attention to ensure continuity of care and appropriate service provision(14).

At the same time, the current food insecurity context introduces additional risk factors for child malnutrition. Cuba imports more than 80% of its food supply and is experiencing significant disruptions in agricultural production, fuel availability, cold-chain functionality, and food distribution systems. Reductions in crop yields, post-harvest losses, inflation exceeding 200% annually, and interruptions in the regulated basic food basket are constraining dietary diversity and access to protein-rich and micronutrient-dense foods. Power outages affecting approximately 70% of households reliant on electric cooking further compromise food utilization and safe preparation (11).

In a context where stunting and low birthweight persist, these constraints increase the risk of dietary insufficiency among pregnant women, infants, and young children, potentially contributing to worsening maternal nutrition, reduced birthweight, impaired child growth, and greater susceptibility to infectious diseases. If sustained, the convergence of food access limitations, health service disruptions, and economic stressors could reverse recent gains in child survival and nutrition indicators.

## Mental Health and Psychosocial (MHPS) conditions

In 2021, the total burden of mental disorders in Cuba was estimated at 2,250.66 DALYs per 100,000 population, with 2,230.57 YLDs per 100,000 (33). The age-standardized suicide mortality rate increased from 2.6 to 9.4 per 100,000 population, from 2019 to 2024 (20). Mental health services in Cuba are integrated within the primary health care system and delivered through a community-based model, with multidisciplinary teams providing care across the country.

One in five people affected by emergencies may experience a mental health condition, ranging from mild anxiety or depression to severe disorders such as psychosis or PTSD. The psychological and social effects can be severe in the short term but can also deteriorate the mental health and psychosocial well-being of affected populations in the long term (63,64). The current crisis is affecting livelihoods, food security, and access to basic medicines, alongside potential displacement and violence, creating stressors, which can trigger acute distress and exacerbate pre-existing mental health conditions due to disrupted access to healthcare services. Symptoms of acute stress, PTSD, anxiety, substance abuse, and depression are the most frequently reported mental health outcomes following major disasters.

The current emergency has occurred at a time when people are in the process of recovery, following multiple successive natural hazards and extreme weather events, which have likely severely impacted people's ability to cope with sudden major alterations to their living conditions. The passage of and impacts of Hurricanes Beryl, Oscar, and Rafael, exacerbated by earthquakes off the coast of Granma in 2024, and Hurricane Melissa in 2025, together with the ongoing stressors due to energy constraints and food insecurity have led to widespread destruction, displacement, and loss of livelihoods. Some of these impacts can be seen as heightened anxiety, depression, and post-traumatic stress, particularly among children, women, and

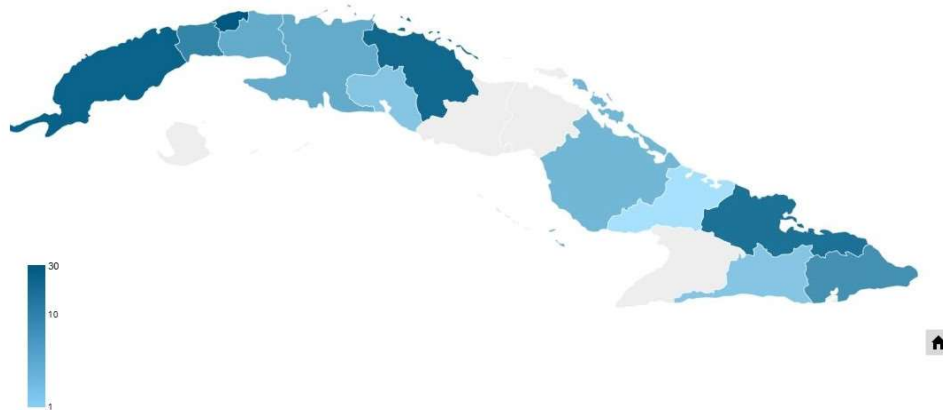
older adults. In many affected areas, service disruptions and resource shortages have further limited access to mental health and psychosocial support (23,31,65). The current crisis has most likely worsened the population mental health situation.

There is a need for mental health and psychosocial support (MHPSS) prioritization not only in the immediate response (1-3 months) but also in the long term (1 year to several years of follow-up). In humanitarian settings, it is also important to differentiate between psychosocial support, often delivered through community-based and short-term interventions aimed at restoring social connectedness and coping capacities, and mental health care for moderate and severe conditions that require specialized clinical management by psychiatrists, psychologists, or other trained professionals within the national health system (66). Access and availability of psychotropic medication need to be guaranteed for required new conditions, as well as for the pre-existent psychiatric conditions. Emergencies frequently expose and widen this gap between levels of care, underscoring the need to establish and strengthen referral pathways that ensure continuity of care. MHPSS interventions implemented during humanitarian response should therefore be effectively linked to existing national mental health systems to enable the identification, referral, and long-term follow-up of individuals with severe mental health conditions (67,68).

## Human rabies transmitted by dogs and mongoose

Cuba is considered an endemic country for canine rabies, and human cases were reported in the country in 2020, 2021, 2022, 2023, and 2024 (50). The main transmitters are dogs, cats, and mongooses inhabiting the territory of Cuba—between 2021 and 2025, 137 rabies cases were reported in dogs, 38 cases in cats, and another 38 cases in mongooses. An annual average of around 17,000 incidents of animal-related aggression or injuries is reported (51), with children being about 40% of the people affected (52). During natural disasters, such as hurricanes and major flooding caused by storms, closer interactions between domestic and wildlife animals (including mongooses) tend to occur (53). In addition, many domestic animals are abandoned, and at the time of rescue—due to stress or lack of food—bite or scratch incidents may occur that requires medical attention for risk assessment for post exposure prophylaxis (54,55). It is essential to promote public awareness regarding the prevention and proper management of bites from suspected animals, including dogs, cats, and mongooses.

**Map 1. Occurrence of rabies in dogs in Cuba, 2021 to 2025.**



Source: Regional Information System for the Epidemiological Surveillance of Rabies (SIRVERA) – Pan American Center for Foot-and-Mouth Disease and Veterinary Public Health, PAHO/WHO. Washington D.C.: PAHO/WHO. Available from: <https://sirvera.panaftosa.org.br/Site/Inicio/Index?idl=2>

## DETERMINANTS OF HEALTH

### Water, Sanitation, and Hygiene (WASH)

According to the most recent estimates, access to at least basic drinking water services is high across the Americas. Cuba reports coverage levels exceeding 90% of the population using improved water sources with a round-trip collection time of no more than 30 minutes. Access to at least basic sanitation facilities, those improved and not shared between households, is similarly high, over 90% (57,58).





Despite this high baseline coverage, multiple stressors are affecting the reliability of water and sanitation services. Periods of drought reported in recent years, including ongoing dry conditions in parts of the country, have reduced water availability and placed additional pressure on supply systems (69). At the same time, the ongoing nationwide fuel shortage is constraining the operational continuity of services. Limited access to fuel has affected waste management services, particularly in Havana, where waste accumulation has been observed, contributing to the proliferation of insects. Fuel shortages have also disrupted the delivery of clean water, medical care, food and other critical aid in areas heavily affected by Hurricane Melissa in October 2025 (16).

The situation is compounded by the residual effects of Hurricane Melissa (October 2025), which damaged water supply networks, sewage systems, and electrical infrastructure. The hurricane affected over 215,000 homes, affecting approximately 645,000 people. Damage to water systems and ongoing power outages have limited the availability of safe drinking water in affected areas (10).

As of late December 2025, nearly 500,000 people were reliant on tanker-delivered water due to continued disruption of water supply services, and multiple water systems in Santiago de Cuba remained out of service. At that time, water safety was a

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primary concern, as power outages and network damage limited water treatment and safe storage capacity. Emergency purification plans were implemented but were unable to meet the needs of all affected populations. These pre-existing service disruptions and reliance on water delivery systems may increase vulnerability under the current fuel shortage, particularly where water distribution and treatment operations depend on sustained fuel availability (10).

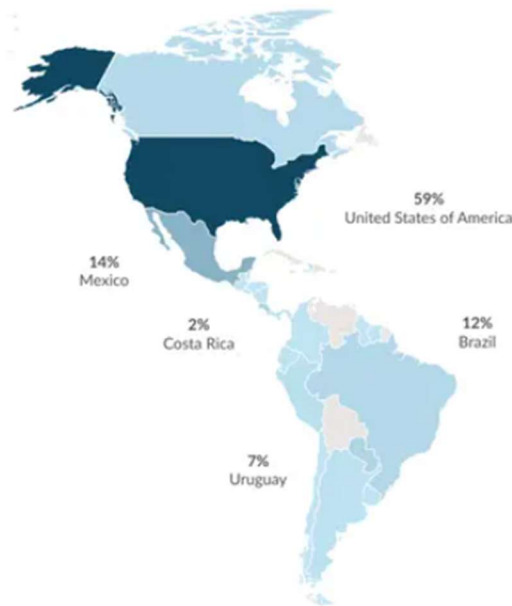
Additionally, in October 2025, Cuba declared a multi-virus arboviral outbreak of dengue, Oropouche, and chikungunya. Risk factors such as stagnant water accumulation during the rainy season, inadequate drainage and infrastructure damage leading to waterlogging, and limited vaccination coverage may lead to a surge in vector-borne disease infections (70).

## Displacement

Displacement in Cuba has intensified in the context of prolonged economic contraction, shortages of essential goods, and recurrent climate shocks, with direct implications for public health. Overcrowded shelters and temporary living conditions increase the risk of waterborne and vector-borne diseases, particularly amid intermittent water supply, poor sanitation, and electricity outages affecting cold-chain systems and health services. Disrupted healthcare access, interruptions to vaccination and chronic disease management, and heightened stress and trauma among displaced populations compound these risks.

Between 2022 and 2023, approximately 10% of the population left the country, with the total population declining from 11.18 million (December 2021) to 10.06 million (December 2023). As of January 2026, there are 23,944 Cuban refugees and 349,971 asylum-seekers registered across the Americas, with nearly 1.88 million Cubans residing in countries in the region. Cubans represent the third largest asylum-seeking nationality worldwide in 2025, with a 140% increase in applications compared to 2024 and more than 50,600 new claims registered in the first half of 2025, primarily in Mexico, Brazil, and Uruguay. Drivers of migration include lack of employment and income, food insecurity, and insecurity or violence. This sustained outflow may further strain household coping mechanisms, remittance flows, and social service continuity within the country (71).

**Map 2. Refugees and asylum-seekers from Cuba. Top 5 in the Americas by Mid-2025.**



Source: UN High Commissioner for Refugees. *Displaced Cubans in the Americas – January 2026*. Geneva; UNHCR: 2026. Available from: <https://data.unhcr.org/en/documents/details/121046>

At the same time, Cuba hosts 190 refugees and asylum-seekers from 16 countries under UNHCR’s mandate, from which 39% lack legal status, 33% are women and children, and 34 individuals require resettlement. Although new immigration and citizenship legislation was approved in 2024, it has not yet entered into force, limiting durable solutions and legal protection pathways (72).

Hurricane Melissa on 29 October 2025 triggered one of the largest recent internal displacements events. More than 735,000 people were preventively evacuated ahead of landfall through Civil Defense coordination, the highest figure recorded in recent hurricane responses (49). The storm affected eastern provinces including Santiago de Cuba, Granma, Holguín, Guantánamo, and Las Tunas, causing widespread housing destruction and infrastructure damage (73). Over 215,000 homes were damaged, affecting approximately 645,000 people. Although evacuation numbers gradually decreased in the weeks following landfall, displacement persisted: earlier reports indicated 2,019 persons remained in shelters as of 2 December 2025, and as of 17 December 2025, 2,760 people were still displaced, including those in shelters, temporary facilities, or with host families (10).

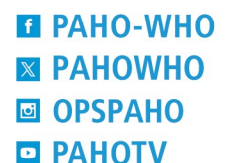
## Food insecurity

Food insecurity in the Caribbean is driven by a combination of structural import dependence, recurrent climate shocks, and rising living costs. As a small island developing state, Cuba is especially vulnerable to external supply disruptions and climate extremes.

Cuba imports more than 80% of the food it consumes, making it highly exposed to global price shocks and supply chain disruptions. This structural dependence has been further aggravated by severe fuel shortages and the February 2026 national “Energy Contingency Plan”, which reduced diesel allocation to the agricultural sector by 60%, paralyzing approximately 70%

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of tractors and reducing land preparation capacity from 15,000 hectares per week in 2024 to fewer than 3,000 hectares in early February 2026. Restrictions in rural electricity supply are projected to cause a 40% reduction in short-cycle crop yields due to irrigation limitations. Simultaneously, food transport capacity in key supplying provinces has dropped to 20% of normal routes, while agricultural product losses at origin may increase by 35% (11).

Cold-chain disruption represents a critical additional risk. Pasteurization plants and meat processing facilities are receiving electricity only a few hours per day, leading to spoilage and reduced availability of perishable foods. For example, approximately 25% of collected milk in Camagüey province was reportedly lost due to insufficient refrigeration. Reduced cold-chain functionality increases food waste, limits protein availability, and elevates food safety risks, particularly in urban areas dependent on centralized processing and distribution systems (11).

Import logistics are also affected. Bulk cargo unloading at ports has slowed by 50% due to energy shortages, increasing delays and increasing costs. Food inflation had already exceeded 200% annually prior to the latest restrictions, further eroding purchasing power and constraining access. In addition, approximately 70% of households rely on electric cooking, meaning prolonged power outages directly compromise food utilization, dietary diversity, and safe preparation (11). Fuel shortages are disrupting the rationing system and the distribution of the regulated basic food basket, disproportionately affecting vulnerable populations reliant on social programs, including school feeding initiatives, maternal care centers, and long-term care facilities (12).

Climate shocks further compound these systemic vulnerabilities. During Hurricane Melissa, agricultural losses were reported across 185,000 hectares, with national authorities estimating that 40% of vegetable production was wiped out. Damage to storage facilities, markets, livestock infrastructure, fishing boats, and cold storage disrupted both crop and animal protein supply chains, constraining availability and livelihoods in coastal communities (5,9,10).

Although historical undernourishment estimates have remained relatively low, the convergence of structural import dependence, constraints affecting fuel and energy availability, cold-chain collapse, high inflation, and recent climate shocks significantly increases the risk of acute food insecurity and nutritional deterioration if these conditions persist.

## HEALTH SYSTEM STATUS AND DISRUPTIONS

Ongoing constraints affecting transport and energy availability, compounded by the residual effects of Hurricane Melissa (October 2025), is placing sustained pressure on Cuba's health system. Service delivery remains constrained by energy shortages, transportation disruptions, and resource limitations.

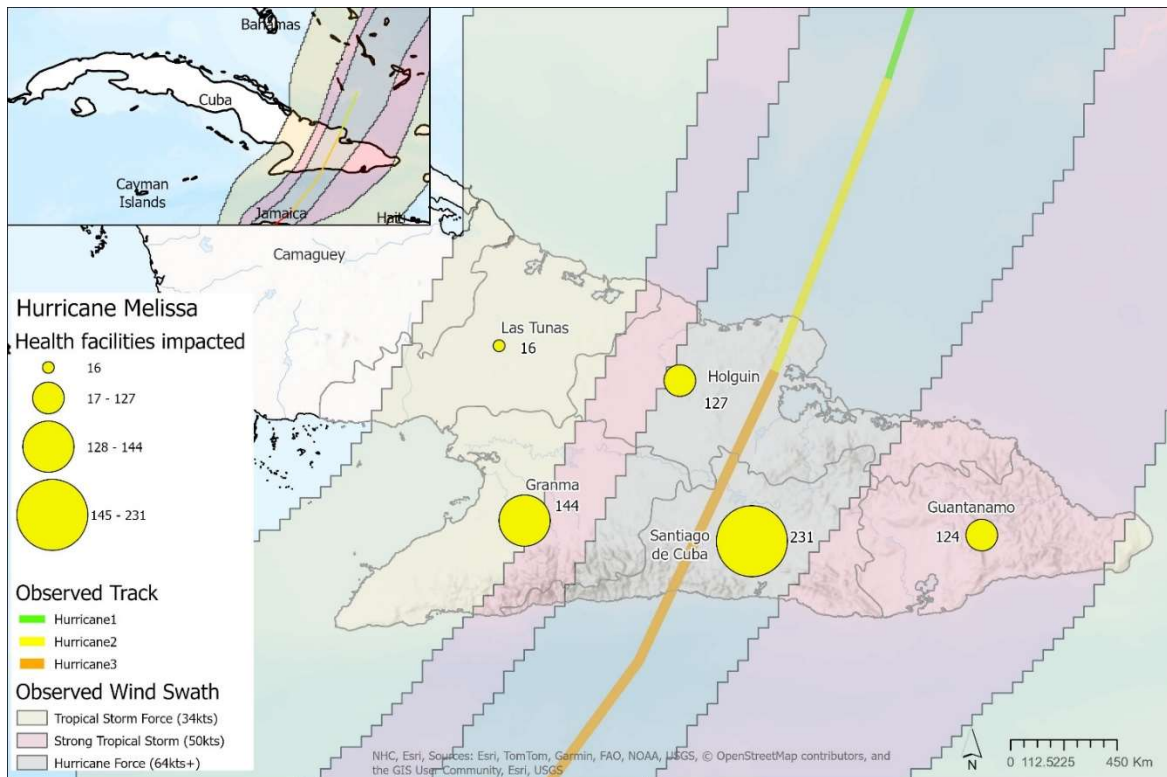
Intensive care units and emergency services are particularly vulnerable due to their dependence on uninterrupted electricity. Fuel shortages and power instability compromise cold chain systems, affecting the production, storage, and distribution of vaccines, blood products, insulin, and other temperature-sensitive medicines. Diagnostic services that require stable power supply are also operating at reduced capacity (12).

Transportation disruptions have significantly affected patient access to care. Limited fuel availability restricts ambulance services, referral systems, and routine patient transport. In Havana, where accommodation costs far exceed the average monthly salary in Cuban pesos (CUP), patients and accompanying family members from other provinces frequently face financial barriers. In some cases, families report sleeping outside hospital facilities due to the inability to secure affordable

lodging (74).

Hurricane Melissa caused extensive structural damage to health infrastructure in eastern Cuba (**Map 2**). A total of 642 healthcare facilities were affected across five provinces: Santiago de Cuba (231), Granma (144), Holguín (127), Guantánamo (124), and Las Tunas. Reported damage included roof and structural collapse (partial or total), flooding, damaged access roads, destruction of electrical and telephone cables, compromised hydraulic systems, and loss of medical supplies and equipment (75). As of 21 January 2026, all health centers are operational, and repairs are ongoing for remaining damage. Basic and vital services had been restored in all affected eastern provinces as of 26 November 2025 (10).

**Map 2. Impacted health facilities in Cuba by province, as of 11 November 2025**



Several measures have been implemented in different areas of the health sector with the aim of rationalizing and organizing resources, seeking to preserve essential services, reorganize capacities, and concentrate resources where they are most needed (76). The main measures are:

- Maintain basic levels of health services: maternal and child health programs, treatment for people with terminal illnesses.
- Reduce the number of staff in institutions without compromising the quality of care.
- Increasing the response capacity in municipalities in the face of travel difficulties, with changes in work.
- Strengthening the family doctor and nurse program.
- Reducing the length of hospital stays for patients.
- Prioritizing diagnostic resources for those patients for whom they are urgent.
- Reduce the level of surgical activities, which consume a lot of electricity and resources.
- Maintain surgeries that are urgent and life-saving.
- Maintain the transport and care service for hemodialysis patients.
- In the absence of transportation, the alternative is hospitalization, as is the case with other patients who require radiotherapy.

- The Medibus service will be maintained as far as possible for those patients in the province who have to go to a hospital for medical appointments or treatment.
- Care will be provided to social institutions: nursing homes, maternity homes, and psycho-pedagogical centers.
- Increase the use of natural and traditional medicine.
- Use telemedicine services as much as possible, despite the shortcomings that still exist, to seek second opinions in cases where it is necessary and it is not possible for the patient to travel to the health institution.
- Priority is given to emergency services.
- Medical care for patients of other nationalities, whether for health tourism or because they reside on the island, is guaranteed.
- Anti-vector actions are maintained, including the transfer of biological samples to research centers for disease identification.
- The production of sodium hypochlorite will be increased.

## HEALTH RESPONSE

### PAHO/WHO Response to Hurricane Melissa (10)

#### *Coordination*

PAHO has completed field visits in the Holguín, Guantánamo, and Santiago de Cuba provinces:

- Between 11 and 17 November 2025, PAHO conducted field missions to assess hurricane-related impacts in health facilities and to verify the implementation and impact of anticipatory actions and early response measures.
- Distribution of supplies was verified in 16 hospitals, as well as the delivery of Primary Health Care (PHC) backpacks to medical offices in hard-to-reach areas and to the provincial integrated emergency medical system.
- Between 2 and 8 December 2025, follow-up missions confirmed progress in the distribution of second and third shipments and identified additional priority needs.
- PAHO leads the health sector, an updated Action Plan for the Response of the Energy Crisis in the aftermath of Hurricane Melissa is under preparation and will be launched in mid-March.

#### *Healthcare*

- Airlifted 2.6 tons of medical supplies, including emergency health kits –with medicines, medical and surgical supplies, enough to treat 5,000 people for three months, 42,000 chlorine tablets to purify ~ eight million liters of water, generators, emergency backpacks, and water tanks to Cuba.
- Technical support ongoing for situation analysis and identification of response priorities, including a technical mission assessment of clinical management, vector control, epidemiology, and laboratory services, as deemed necessary by MINSAP.
- Support in identifying a list of critical supplies for vector control (insecticides and fumigation equipment) and for the care of Chikungunya and dengue patients, focusing on the prevention of severe cases and deaths from these diseases (medicines for severely ill patients, sphygmomanometers, and others).

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- Technical support was provided for the review and update of the chikungunya clinical management guidelines, with a consultation with regional experts.
- Support for the development of a national proposal for the mobilization of resources for the response to arboviruses.

## **Surveillance**

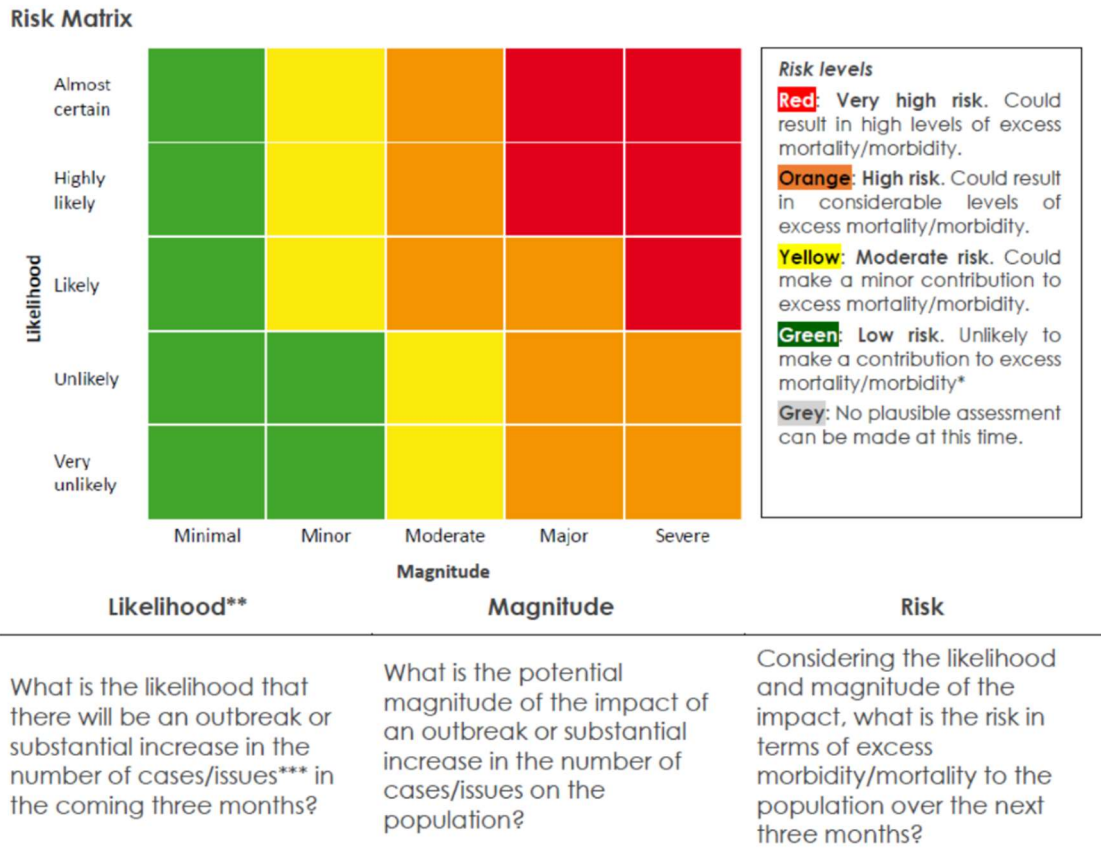
- Given the ongoing arboviral situation on the island, including chikungunya and dengue, PAHO is organizing, in coordination with the Ministry of Health, a technical cooperation mission. The mission is expected to include one management expert, one clinical diagnosis and case management expert, one virologist, one entomologist, and one epidemiologist, and will aim to review protocols and interventions for the care of adult and pediatric chikungunya cases, as well as to support the country's comprehensive response for the prevention and control of arboviral diseases.
- PAHO continues to support surveillance, vector control, and risk communication for the arbovirus situation in Cuba, with particular focus on the chikungunya situation and reagents have been procured to support sequencing of severe chikungunya cases.
- PAHO is also supporting the introduction of new technologies for entomological surveillance and vector control.

## **Logistics/countermeasures**

- PAHO has coordinated multiple shipments to Cuba between November 2025 and December 2025, including 20 pneumonia kits and 4 Interagency Emergency Health Kits (IEHKs), medical field backpacks, donated medicines from Direct Relief (10 units), one generator, 16 kVA power plants (4 units), 14 electrical generators (16.4kVA, 12 kVA), 14 portable 100l fuel pumps, and three tents (42m2).
- In January 2026, two additional shipments were delivered to Cuba, including two power generators (45 kVA), donated medicines from Direct Relief, and water purification tablets (Aquatabs). Additional procurement activities are currently ongoing.
- PAHO has received funding from multiple donors that will support future procurement of items for the rehabilitation of health facilities in hurricane-affected areas, and equipment and materials to strengthen epidemiological surveillance to contribute to the early detection and timely management of infectious disease outbreaks, including diagnosis, infection prevention and control, vector control, and access to safe water and emergency sanitation measures in health institutions.

## Appendix 1. Risk Assessment Methodology

Figure 9. Risk matrix for assessing the likelihood and potential magnitude of health impact



Source: World Health Organization. Public Health Information Services. Geneva: WHO; 2018. Available from: <https://healthcluster.who.int/publications/m/item/public-health-situation-analysis-standard-operating-procedures>

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