

Public Health Situation Analysis

Myanmar

Conflict and humanitarian crisis

December 2024



Contents

PREFACE	
DISCLAIMER	
ABBREVIATIONS AND ACRONYMS	I
SUMMARY OF THE CRISIS	1
Key features	
PEOPLE IN NEED OF HEALTH SERVICES	2
1. HEALTH STATUS AND THREATS	3
POPULATION MORTALITY	3
VACCINATION COVERAGE	3
PRIORITY HEALTH THREATS	4
MATERNAL AND NEONATAL CARE; AND SEXUAL AND REPRODUCTIVE HEALTH	5
MALNUTRITION AND CHILD HEALTH	5
ENDEMIC INFECTIOUS DISEASES	5
Malaria	5
Dengue	ϵ
Other endemic diseases	ϵ
EPIDEMIC-PRONE DISEASES	6
Acute watery diarrhoea and cholera	θ
Influenza	
Tuberculosis and HIV	
Tuberculosis	
HIV	8
Antimicrobial resistance	8
NONCOMMUNICABLE DISEASES	
Mental health and psychosocial support	
Trauma and disabilities	
Crisis-attributable injuries	
Health and disability	9
HEALTH DETERMINANTS	
Water, sanitation and hygiene (WASH)	
Natural environment and disasters	S
2. HEALTH SYSTEM NEEDS	11
Access to health care	11
Health workforce disruption	
Restrictions on non-State providers to maintain services	11
Reduction in financing	
Supply chain disruption	
3. HEALTH RESPONSE ORGANIZATION/COORDINATION	13
Availability/functionality of humanitarian health resources	
4W/5W Matrix	
REFERENCES	1/

Preface

Public health threats represent a significant challenge to those providing health-care services in a crisis. The health issues and risk factors addressed in this document have been selected on the basis of the known burden of disease in this country, crisis-emergent health issues, and their potential impact on morbidity, mortality, response and recovery. It is hoped that this public health situation analysis (PHSA) will facilitate the coordination of activities among all agencies working with the populations affected by the crisis. The document contains a short summary of the crisis, health status of and threats to the affected population, health system needs, and humanitarian health response. This document is based on available data at the time of publication and may be updated as the situation evolves.

Disclaimer

The designations utilized and the content presented in this publication do not imply the endorsement of viewpoints of the World Health Organization (WHO) regarding the legal standing of any person, country, territory, city, or area, including its authorities, or with respect to the demarcation of its frontiers or boundaries.

WHO has sourced different available documents to extract the information presented in this publication. This document is availed without any explicit or implied warranties. The reader assumes full responsibility for interpreting and utilizing the content. Under no circumstances shall WHO be held liable for damages arising from the use of this material. Certain data change rapidly and may become outdated quickly. For such data, it is recommended that this report be read in conjunction with other regularly published situation reports for a broader perspective. Some data have been repeated in more than one section to facilitate quick reference for the reader.

It should be noted that surveillance systems managed by the Ministry of Health (MoH) of the State Administration Council (SAC) have not been able to collect data from most of non-SAC-controlled areas, and as such, available surveillance data do not reflect the situation of the entire country, and rather reflect the situation of areas controlled by SAC.

Sincere thanks to the experts who provided technical contributions to arrive at the final version of this document.

Abbreviations and acronyms

AFP acute flaccid paralysis
AWD acute watery diarrhoea

DPT diphtheria, pertussis and tetanus

EPI Expanded Programme on Immunization

ERW explosive remnants of war

EWARS Early Warning, Alert and Response System

GBV gender-based violence

HIV human immunodeficiency virus

HPV human papillomavirus IDP internally displaced person

ILI influenza-like illness

I/NGO international nongovernmental organization

IPV inactivated polio vaccineMDR multidrug-resistantMoH Ministry of HealthMR measles-rubella

NCD noncommunicable disease
NHP National Health Plan

NITAG National Immunization Technical Advisory Group

OCV oral cholera vaccine

OOP out of pocket
OPV oral polio vaccine

PHSA public health situation analysis

PLHIV people living with HIV

SAC State Administration Council
SDG Sustainable Development Goals

SEAR South-East Asia Region

TB tuberculosis

U5MR under-five mortality rate

UN United Nations

UNICEF United Nations Children's Fund

UXO unexploded ordnance

VPD vaccine-preventable disease
WASH water, sanitation and hygiene

Summary of the crisis

Key features

Location:	Myanmar and surrounding areas			
Typology:	Conflict, displacement, humanitarian access, food security			
WHO Grade:	Protracted Grade 3, Myanmar Conflict and Humanitarian Crisis			
Brief description of event:	Myanmar has been in a state of emergency since 1 February 2021 following the takeover of the government by the Myanmar military. In response, a civi disobedience movement began, which then turned into armed resistance, resulting in significant population displacement and interruption of services. In 2025, there will be an estimated 19.9 million people in need of humanitarian assistance, 4 million people internally displaced, 1.5 million refugees, and 386 000 Stateless people in Myanmar (Rohingya) amid a deteriorating situation, particularly in northern Shan, Mandalay region and Rakhine state (OCHA, 2024). Twenty-five million people are estimated to be living in poverty because of the ongoing conflict and humanitarian crisis. There have been approximately 433 attacks on health-care facilities reported. Intensification of conflict, displacement of millions of people and decrease in the health workforce continue to exacerbate health service delivery challenges.			
Operational constraints	 (i) Significant displacement, acute food insecurity and interruption of essential services, including health services, particularly in conflict-affected and hard-to-reach areas. (ii) Protection concerns, including increasing reports of landmine and explosive ordnance incidents, premature returns, confiscation of civilian assets and the threat of forced recruitment. (iii) Restrictions on domestic and cross-border supply chains, restricting availability of sufficient and quality vaccines, medicines and health supplies. 			

Humanitarian profile















19.9	15.0	5 800	368 000	4	447 000	1.5
million	million			million		million
Population in need of humanitarian assistance	Other crisis- affected people with humanitarian needs	Deaths	Non-displaced Stateless persons	Number of internally displaced persons (IDPs)	Returnees, resettled and locally integrated IDPs	Refugees

People in need of health services

A total of 12.9 million people will need humanitarian health interventions in 2025, with the most severe health needs identified in Rakhine, followed by Sagaing, Kachin, Kayah, Tanintharyi, east Bago and northern Shan regions. Urgent humanitarian health needs in Myanmar are driven by the lack of access to basic health care as a result of damage to and destruction of health facilities; direct attacks on health centres, health workers, patients and ambulances; logistics challenges in securing life-saving medical supplies; and shortage of trained health workers. Women, children, older people and people with disabilities, and those with mental health needs are disproportionately affected, facing heightened risks and barriers to accessing care. Additionally, large-scale displacement, unsafe drinking water, inadequate sanitation, and the interruption of routine health programmes are significantly increasing the risk of disease outbreaks.

1. Health status and threats

Population mortality

As of 2021, the leading causes of mortality in Myanmar were stroke, ischaemic heart disease and tuberculosis (TB) (WHO, 2024). The under-five mortality rate (U5MR) is 40 per 1000 live births, with diarrhoeal diseases as the leading cause, and over 50% of deaths occurring in the neonatal period (UN IGME, 2023). However, recording and reporting have been significantly affected since the state of emergency, and data are not available on how the ongoing conflict is affecting mortality.

Vaccination coverage

Immunization coverage in Myanmar significantly declined in 2021 with coverage dropping to below 50% for all antigens – ranging from 7% to 48% (WHO, 2024a). Although these levels have recovered slightly since then, with a diphtheria—tetanus toxoid and pertussis (DTP3¹) coverage of 71% in 2022 and 76% in 2023, vaccination coverage is still not back to pre-2021 levels (Fig. 1). In response, a large-scale catch-up immunization drive has been conducted in a phased manner targeting the more than 1 million zero-dose and under-vaccinated children of 1 to <5 years of age (WHO, 2024b). A total of four vaccines (pentavalent, measles—rubella, oral polio vaccines [OPV] and injectable polio vaccine [IPV]) containing eight antigens are used for the catch-up, with three rounds of immunization at two-month intervals. Three such rounds have already been conducted as the first phase of the large-scale catch-up in three regions (Yangon, Mandalay and Naypyitaw).

National immunization coverage, 2014-2023 % Coverage BCG DTP3 OPV3 MCV1 MCV2

Fig. 1: National immunization coverage, 2014–2023

Source: WHO and UNICEF estimates of immunization coverage

However, people in non-State Administration Council (SAC)-controlled areas have no or very limited access to vaccines, and systematic immunization cannot be carried out in many of these areas. Health workers face security risks and vaccine access and delivery are restricted. For example, DTP3 vaccination coverage by district (Fig. 2) shows an overall decrease in the number of districts reporting vaccination coverage of over 70% in 2023 compared to 2022 (WHO, 2024a). Decline in immunization coverage increases the risk of outbreaks of vaccine-preventable diseases (VPDs). A number of diphtheria and measles cases were reported in 2024; however, there are concerns about reporting coverage resulting in substantial underreporting (Table 2).

¹ Myanmar uses diphtheria–tetanus toxoid and pertussis in the pentavalent vaccine.

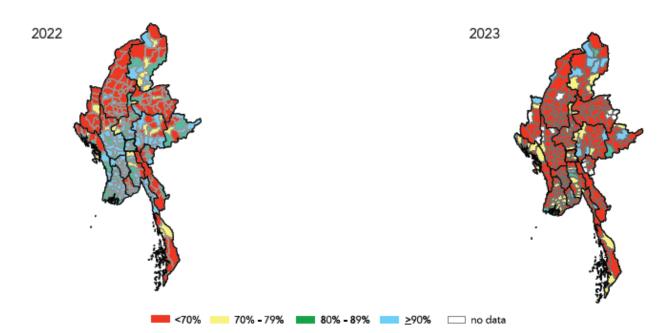


Fig. 2: Coverage of DTP3 vaccination by district, Myanmar, 2022 and 2023

Source: South-East Asia Region annual EPI reporting form

Priority health threats

Table 1 summarizes the current analysis of the magnitude of different health problems impacting the crisis-affected population grouped into major disease types. Changes in the projected magnitude of these problems are also shown; these assume that the humanitarian health response (availability, coverage, quality) remains unchanged from its current status.

Table 1. Magnitude of expected health threats and their expected evolution over time 1

Health problems	Nov–Dec 2024	Jan–Mar 2025	Apr–Sep 2025
VPD outbreaks			
Epidemic/pandemic outbreaks			
Vector-borne diseases			
Malnutrition and child health			
Maternal and neonatal care			
Sexual and reproductive health			
Adolescent health			
HIV and viral hepatitis			
Tuberculosis			
Violence and injury			
NCDs and cancer			
Mental health			
Natural environment and disasters			

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. Will very probably not result in any excess mortality/morbidity

Grey: No plausible assessment can be made at this time.

Maternal and neonatal care; and sexual and reproductive health

Maternal mortality ratio had dropped by 52% (from 371 to 179 maternal deaths per 100 000 live births), with a 3.7% annual rate of reduction between 2000 and 2020 (WHO, 2023). Similarly, the under-five mortality rate (U5MR) and the neonatal mortality rate had decreased by 63% (from 115 to 40 per 1000 live births) and 54% (from 48 to 21 per 1000 live births), respectively, between 1990 and 2022 (UN IGME, 2023). Given the ongoing service interruptions, the availability and accessibility of maternal and neonatal services are of concern. However, relevant recent data on maternal and neonatal care are not available.

Sexual and reproductive health-related data remain limited since 2021. Access to antenatal, delivery, postnatal care as well as family planning is challenging, particularly in conflict-affected areas, and reliance is on the private sector and community-based organizations. Access is limited to contraceptives and contraceptive devices as well as other medicines, medical supplies, and equipment for maternal, child and sexual health, increasing the risk of unwanted pregnancies and unsafe abortions. Widespread gender-based violence (GBV) in Myanmar contributes to significant health challenges and perpetuates social and health inequalities for women and girls.

Malnutrition and child health

Acute food insecurity is at critically high levels in various parts of the country, with 27% of households reporting challenges with accessing food (World Bank, 2024). In March 2024, it was estimated that the cost of a healthy diet increased by 29% from the previous year, with the increase being even higher in conflict-affected areas such as Rakhine, Chin, Kaya, and Shan states (the cost of a healthy diet in Rakhine was 60% higher than the national average), driven in large part by price increases of staple foods (IFPRI, 2024). According to the global malnutrition estimates in 2023, stunting among under-5 children in Myanmar reduced from 31.1% in 2012 to 24.1% in 2022 but revised estimates are needed, given the evolving situation in the country (WHO, 2024c).

Endemic infectious diseases

Malaria

Over 38 million people, approximately 70% of the population, are at risk for malaria and 291 townships are endemic for malaria. The majority of cases are detected in 52 townships, many of which are conflict-affected areas along the international borders. Mobile and migrant populations, which account for 7% of the total population, internally displaced persons (IDPs), and people who live in hard-to-reach areas are the most vulnerable. In 2023, a total of 228 567 confirmed cases of malaria, predominately *P. vivax* cases, were

² Changes in risk over time shows the expected progression after an acute-onset emergency, or predictable seasonality of morbidity.

reported. The peak season is typically during June–August and coincides with the monsoon season (WHO, 2023a). Internal data up to June 2024 indicate a similar seasonal trend, with a lower number of reported cases compared to the same period in 2023. The target of the National Strategic Plan for 2021–2026 is to achieve zero indigenous *P. falciparum* malaria cases by 2026 and reduce morbidity due to all species of malaria by 67% relative to the 2021 baseline figure. However, it is unlikely that these targets will be achieved based on the current trajectory.

Dengue

Dengue is endemic in Myanmar and, like malaria, sees a seasonal peak in the middle of the year. In the first three quarters of 2024, a total of 5061 cases, including 13 deaths, were reported compared to 16 207 cases in entirety of 2023 (WHO, 2024d). Response efforts for both dengue and malaria, including vector control practices and distribution of bednets, have been directly impacted by the ongoing conflict, thereby increasing the risk of further outbreaks.

Other endemic diseases

Lymphatic filariasis, leptospirosis, rickettsioses and rabies remain endemic in Myanmar. Progress in filariasis control is hindered by political instability, while leptospirosis and rickettsioses are considered endemic in some areas and likely underreported. Postexposure prophylaxis (PEP) for rabies is reportedly available in the major cities under SAC-controlled areas, with over 500 000 treatments yearly (GARC, 2024). However, cases show an increasing trend, due to limited resources and constrained control measures.

Epidemic-prone diseases

Surveillance/early warning, alert and response capacity

Over the past years, following the crisis in 2021, the surveillance and outbreak response systems have become increasingly fragmented and are non-existent in some areas. While State Administration Council Ministry of Health (SAC-MoH) continues to run surveillance for priority communicable diseases, such as VPDs, HIV, TB, malaria and dengue, these systems do not reach the non-SAC-controlled areas. In Rakhine and Kachin provinces, an early warning surveillance and response system (EWARS) is implemented with support from health cluster partners (mostly syndromic), for which a limited number of health services provide routine reports. Moreover, access to laboratory diagnosis is extremely limited outside of SAC-controlled areas, making disease confirmation impossible or possible only after significant delay.

The capacity to detect and investigate signals is limited, and complex security and political landscapes make public health response operations to control transmission and care for those affected very challenging. Disease surveillance gaps in Myanmar, combined with the low immunization coverage, pose major health security threats to the population of Myanmar and those in the border areas of surrounding countries. Such challenges have been experienced through the recent cholera outbreaks and spillover of once almost eliminated diseases such as malaria to neighbouring countries. Ensuring a minimum surveillance for outbreak-prone diseases in the entire country is essential to produce health intelligence, inform public health decision-making and allocate resources to ensure an adequate response to potential outbreaks.

Acute watery diarrhoea and cholera

Myanmar had been cholera-free, with the last outbreak reported in a township in Bago region in 2016. However, cases of acute watery diarrhoea (AWD) have been reported in Yangon and Rakhine regions since June 2024, some of which were laboratory-confirmed as cholera infection. Subsequently, AWD outbreaks that include laboratory-confirmed cholera cases have also been reported in Ayeyarwaddy, Mandalay and Mon state. As at the time of this report, there have been nearly 5000 AWD cases reported from Yangon and nearly

3000 cases from Rakhine region (WHO 2024e). There are limited data available on the treatment of severe cases, including cholera treatment centres (CTCs) and cholera treatment units (CTUs), which limit the understanding of mortality. A reactive vaccination campaign using oral cholera vaccine (OCV) has been carried out in Yangon region, Mon state and Mandalay state, with 2.4 million vaccines. However, the limited acknowledgement of cholera as a causative agent limits risk communication and health promotion efforts among at-risk communities.

Vaccine-preventable diseases

At present, only approximately 30%–40% of townships, which account for 75% of the population, are accessing vaccines provided by the United Nations and other international organizations and covered by the VPD surveillance system managed by the SAC-MoH. Those living in non-SAC-controlled areas are neither receiving vaccines from the national immunization programme, nor are they covered by VPD surveillance. The sensitivity of the VPD surveillance system deteriorated at all levels during the pandemic and the current political situation has further limited the availability of reliable data for routine immunization. The decline in VPD surveillance activities has impacted early notification and timely response to VPD outbreaks. The situation has increased the vulnerability to VPD outbreaks (Table 2).

Table 2. Reported cases of vaccine-preventable diseases, Myanmar, 2019–2023

Diseases	Data type	2019	2020	2021	2022	2023
Acute flaccid paralysis (AFP)	Reported AFP cases	420	187	33	151	265
	Confirmed polio cases	O ^a	0	0	0	0
Measles	Reported fever with rash cases	6544	682	30	57	180
	Confirmed measles	5252	444	8	10	15
Rubella	Tested for rubella	1320	257	25	57	171
	Confirmed rubella	28	3	3	0	2
Diphtheria	Suspected	121	273	7	41	97
	Confirmed diphtheria	22	169	3	29	90
Japanese encephalitis (JE)	Reported AES cases	2068	871	43	91	385
	JE confirmed cases	115	75	2	6	19
Pertussis	Clinically confirmed cases	30	13	No data	No data	50
Neonatal tetanus	Clinically confirmed cases	25	17	8	14	8

AES: acute encephalitis syndrome; cVDPV: circulating vaccine-derived poliovirus

Oa Excludes six type 1 VDPVs

Source: Ministry of Health and WHO 2024a

Influenza

Every year from June to September is the influenza-endemic season for Myanmar, which coincides with the monsoon season. Reporting of influenza data and processing of virological samples have been severely affected by the current humanitarian crises and conflict and there are very limited data from 2021 onwards. According to the information reported to the FluMart of the Global Influenza Surveillance and Response system (GISRS), most samples detected in Myanmar in early 2023 were due to influenza A(H1N1) pdm09 while the approximately 150 positive samples in 2024 were predominantly of the A(H3) subtype.

Tuberculosis and HIV

Tuberculosis

Tuberculosis is a major public health problem in Myanmar and one of the leading causes of mortality. As per the *Global TB report 2024*, the estimated TB incidence was 558 (328–824) per 100 000 population in 2023, an increase from 475 (312–675) per 100 000 population in 2022. In 2023, there were an estimated 302 000 (178 000–446 000) incident TB cases, including an estimated 20 000 people with TB living with HIV (12 000–30 000). In 2023, 2628 multidrug-resistant (MDR-TB) cases were notified (52% of target). An estimated 49 300 TB deaths occurred in 2023. Treatment coverage is low, with an estimated 43% of new and relapse TB cases placed on treatment (WHO, 2024f), with inequitable access to TB treatment throughout the country.

HIV

Myanmar has the second-highest HIV prevalence among adults 15–49 years (0.9%) in the WHO South-East Asia Region, with an estimated 280 000 people living with HIV (PLHIV). In 2023, there were an estimated 10 000 new infections and 6400 AIDS-related deaths (UNAIDS, 2024). Approximately 70% of PLHIV were reportedly accessing antiretroviral therapy; however, service interruptions, particularly in conflict-affected and hard-to-reach areas, threaten continuity of treatment and access to harm reduction services and potential massive emergence of HIV drug resistance.

Viral hepatitis

According to a national seroprevalence survey conducted among the general population in 2015, the prevalence of hepatitis B and hepatitis C was high, at 6.51% and 2.65%, respectively. The protracted emergency situation in Myanmar has undermined access to health services and impacted the uptake of new enrolment for hepatitis C treatment and routine reporting system, as well as the scale up and integration of services. Childhood immunization coverage of timely birth dose and third dose of hepatitis B vaccine are suboptimal (17% and 76%, respectively, in 2023 – WHO, 2024a).

Antimicrobial resistance

Myanmar endorsed a National Action Plan on antimicrobial resistance (AMR) (2017–2022). The national AMR surveillance report in 2018 had already reported a high level of antibiotic resistance in Myanmar.² In 2019, seven sentinel surveillance sites for AMR were established; however a few of them discontinued their functions. The ongoing disruption to the health system, including challenges in ensuring continuity of supply of quality-assured medicines in some areas, loss of health workers trained in optimal use of antibiotics and infection prevention and control, limited implementation of stewardship programmes, and lack of availability or transparency of the data on the level of AMR and antibiotic consumption challenge efforts to monitor and control AMR.

² According to the national AMR surveillance report in 2018 (using 2016 data from 26 hospitals regularly participating in external quality assurance schemes), methicillin resistance was detected in 29.6% of *S. aureus* isolates (590/1996), vancomycin resistance in 29.8% of isolates of *Enterococcus* species (53/178), and a phenotype of probable extended spectrum beta-lactamase (ESBL)-producing Enterobacteriaceae in 46.8% of isolates (512/1095). The proportion of carbapenem resistance was 21.2% in *Acinetobacter* spp. (54/254), 26.8% in *Pseudomonas* spp. (345/1287) and 14.2% in Enterobacteriaceae (1002/7056).

Noncommunicable diseases

Chronic diseases

According to the latest available WHO noncommunicable disease (NCD) country profile for Myanmar, four major NCDs are estimated to account for 71% of all deaths, with a proportional mortality of 31% for cardiovascular diseases, 13% for cancers, 10% for chronic respiratory diseases and 6% for diabetes (WHO, 2020). Deaths due to NCDs are expected to increase by 21% over the next decade if effective prevention and control measures are not undertaken.

Mental health and psychosocial support

No national-level prevalence data have been published on mental health after 2020. Prior to the COVID-19 pandemic and ongoing conflicts and displacement, available data indicated a relatively high prevalence of mental distress and other mental health conditions. The ongoing unrest has likely exacerbated mental health issues and increased the risk of developing depression, anxiety, post-traumatic distress syndrome and severe mental trauma while also placing additional strain on the country's mental health infrastructure.

Trauma and disabilities

Crisis-attributable injuries

During the first nine months of 2024, as per the recent monitoring data from the United Nations Children's Fund (UNICEF) on landmine and explosive remnants of war (ERW) incidents, a total of 889 casualties have been reported nationwide (UNICEF, 2024). Since February 2021, 433 attacks on health care have been documented in the WHO Surveillance System for Attacks on Health Care, resulting in 81 deaths and 272 injuries, placing Myanmar third globally for such incidents.

Health and disability

In 2019, it was estimated that nationally, approximately 5.9 million people were living with disabilities in Myanmar, constituting 12.8% of the country and with variability by state, with states like Chin, Rakhine and Ayeyarwady reporting rates as high as 20.6% (MIMU, 2021). While more updated information is not available, it is likely that the number of people living with disabilities has increased compared to previously reported values, due to conflict-related injuries and the impacts of restricted health-care infrastructure from the pandemic and the political unrest.

Health determinants

Water, sanitation and hygiene (WASH)

According to data from the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) in 2023, 57% of the population had access to safely managed drinking water and 61% of the population used safely managed sanitation services (JMP, 2023). Data are limited, but the ongoing outbreak of AWD, at least partially attributable to cholera, highlights ongoing WASH challenges. The monsoon season is associated with heightened risk of food- and waterborne diseases.

Natural environment and disasters

An estimated 28 million people live in districts with a high risk of flood exposure in at least a part of the district, mainly along Myanmar's coasts, the Ayeyarwady river and Kayin. Additionally, there is a risk of cyclones and major storms. The Ayeyarwady delta, the central dry zone and northern and eastern hill regions are most likely

to experience drought, whereas Kayah and Shan are at the highest risk of the negative impact of severe drought. The risk is significant, and there has been limited progress towards strengthening climate-resilient health systems. Vulnerability and adaptation assessments have not been conducted yet and the health-related National Adaptation Plan has not been finalized. In September 2024, Typhoon Yagi affected over 1 million people, including many who had already been displaced by the conflict, submerging 70 out of the country's 330 townships (UN, 2024).

2. Health system needs

Various disruptions of the local health system continue to affect delivery of preventive and curative health-care services.

Access to health care

The twin crises emerging from COVID-19 and the military takeover in 2020 and 2021 have further challenged an already fragile health system. Access to health services is challenged due to considerable attrition of the health-care workforce, large-scale migration of health professionals, unavailability and unaffordability of key essential medicines and vaccines, restriction of access to the conflict-affected areas, and attacks on health-care facilities. In particular, access to quality health care continues to deteriorate in hard-to-reach areas, conflict-affected areas and non-SAC-controlled areas. Recent reports also suggest that the licenses of some private clinics and hospitals were revoked. It is reported that only 295 private hospitals were issued licenses to operate.

Health workforce disruption

From 2016 to 2020, a 13.3% growth in the health workforce was observed, resulting in a density of six doctors and nine nurses per 10 000 population, with a combined density of 17.8 health workers (doctors, nurses and midwives) per 10 000 population. This suggested that, even before the military takeover, Myanmar had not reached the benchmark of the WHO-suggested average density of 22.8 health workers per 10 000 population to deliver a package of health services, compatible with the standards of the Sustainable Development Goals (SDGs). Following the military takeover, Myanmar saw a significant decline in density of the health workforce to 1.01 doctor and 1.96 nurses per 10 000 population in 2022–2023. Data reported through the national health workforce accounts suggest a significant decrease in the availability of nursing personnel by 73% between 2019 and 2022 (n = 40 830 to n = 11 000) (WHO, 2024e). A substantial number (estimated 50%) of the health workforce in the public sector took part in civil disobedience (Global New Light of Myanmar, 2023; Myanmar Now, 2023). Hospitals were not allowed to hire health workers who opposed the SAC positions.

Restrictions on non-State providers to maintain services

Non-State health service providers are severely restricted in their ability to provide essential health services because of shortages of skilled health workers and difficulties imposed by the SAC on the importation of medical supplies, including pharmaceuticals. Reliance on locally procured medicines increases the risk of suboptimal quality medicines, interruption of treatment and AMR. The use of volunteers and patients' family members for tasks normally carried out by medically trained personnel is significantly affecting the quality of care. In addition, security concerns are deterring people from visiting clinics or even hospitals for referral. People are shifting to the use of teleconsultations, with the inherent risk of misdiagnosis. In addition, restriction in access to cash is a serious impediment for non-State health service providers (Than, 2024).

Reduction in financing

The latest National Health Accounts confirmed that 76% of the current health spending in Myanmar is out of pocket (OOP) on the part of families, as per the Global Health Expenditure Database in 2019 (WHO, 2024g). Although it was found to be lower than that in previous periods, it is one of the highest in the Region. OOP expenses were already significant and continue to increase, necessitating further household spending in view of depleted government tax resources, on top of declining or inaccessible donor support (multilateral, bilateral donors).

Supply chain disruption

International and domestic supply chains have been significantly affected by the military takeover, including through challenges with land and air transportation and security threats. Currently, there are shortages of key essential and lifesaving medicines (including injectable drugs) while some key essential medicines were available in only a limited number of private pharmacies. The major reasons that influenced drug availability and pricing included prolonged import licensure procedures, delayed customs clearance and restrictions on drug importation.

3. Health response organization/coordination

Availability/functionality of humanitarian health resources

Health Cluster Partner Coordination is actively maintained at both the national level and across five key humanitarian areas. These areas include the following:

- 1. Rakhine region (Rakhine and southern Chin, Paletwa), coordinated from the hub in Sittwe
- 2. North-east region (Kachin and northern Shan), managed from Myitkyina
- 3. North-west region (Chin excluding Paletwa, Magway, Mandalay and Sagaing), with a hub in Mandalay
- 4. South-east region (eastern Bago, Kayin, Mon, Tanintharyi), coordinated from the hub in Hpa-An
- 5. Southern Shan and Kayah state, coordinated from the hub in Taunggyi.

The Myanmar Health Cluster consists of 66 partners, including national and international nongovernmental organizations (NGOs), the Red Cross Movement and UN agencies. The majority of Health Cluster partners in Myanmar are local NGOs, highlighting their importance in the delivery of health services and supplies to areas with severe access restrictions. It is the Health Cluster's role to mobilize partners and resources to areas in need, for a range of activities, including outbreak investigation and response, but also through the deployment of mobile clinics. The Health Cluster works through a network of subnational Health Cluster coordinators in different parts of Myanmar. For 2025, Health Cluster co-coordinators from NGO partners will be recruited to strengthen the team.

For the 2025 Humanitarian Need and Response Plan for Myanmar, the Health Cluster has estimated that 12.9 million people will be in need of humanitarian health interventions during 2025, an increase from 12.1 million in 2024. In line with the projected decline in donor funding, only 2.4 million people (19% of the total people in need) will be targeted during 2025, as compared to 2.7 million in 2024: the majority are crisis-affected people with humanitarian needs (57%), followed by IDPs (34%), non-displaced Stateless people in Rakhine (5%), and returned, resettled and locally integrated IDPs (4%).

4W/5W Matrix

Through a monthly reporting mechanism, 66 Health Cluster partners submit data on the people reached with their health interventions, such as primary and secondary health services, sexual and reproductive health services, including emergency obstetric care, mental health and psychosocial support, cash assistance for referral to specialized care such as rehabilitation services, vaccination and training. Disaggregated data are submitted by gender and age and whether people are considered to have a disability, as well as whether people are categorized as IDP, returnee, Stateless, or otherwise affected by the crisis.

The data are made available on an interactive dashboard, which is accessible to only a restricted group of viewers, to maintain the confidentiality of the Health Cluster partners, in line with jointly agreed information-sharing protocols.

References

- Global Alliance for Rabies Control (GARC) [website] (2024). Myanmar: rabies elimination progress. (https://rabiesalliance.org/country/myanmar, accessed 12 December 2024).
- International Food Policy Research Institute (IFPRI) (2024). Monitoring the agri-food system in Myanmar: the rising costs of diets March 2024 survey round. Myanmar SSP Research Note 107. Washington, DC (https://myanmar.ifpri.info/2024/05/07/monitoring-the-agri-food-system-in-myanmar-the-rising-costs-of-diets-march-2024-survey-round/, accessed 12 December 2024).
- WHO/UNICEF Joint Monitoring Programme (JMP) [website]. (2023). The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (https://washdata.org/, accessed 12 December 2024).
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA) (2024). Humanitarian Needs and Response Plan Myanmar (https://humanitarianaction.info/plan/1275, accessed 12 December 2024).
- Myanmar Information Management Unit (MIMU) [website]. (2021). Disability in Myanmar (2014–2019). A MIMU Analytical Brief. Myanmar: Myanmar Information Management Unit (https://themimu.info/disability-analysis, accessed 12 December 2024).
- Than K, Bertone MP, La T, Whitter S. Assessing the role of non-state actors in health service delivery and health system resilience in Myanmar. Int J Equity Health. 2024;23(1):221. https://doi.org/10.1186/s12939-024-02292-3
- United Nations (UN) Myanmar [website]. (2024). Myanmar Humanitarian Update No. 41 (https://myanmar.un.org/en/280897-myanmar-humanitarian-update-no-41, accessed 12 December 2024).
- Joint United Nations Programme on HIV/AIDS (UNAIDS) [website]. (2024). Country factsheets Myanmar (https://www.unaids.org/en/regionscountries/countries/myanmar, accessed 12 December 2024).
- United Nations Children's Fund (UNICEF). (2024). Myanmar Landmine/ERW Incident Information 2024(Q3) (https://themimu.info/sites/themimu.info/files/documents/Infographic_Landmines_ERW_Incident_Information_2024_Q3.pdf, accessed 12 December 2024).
- UN Inter-Agency Group for Child Mortality Estimation (IGME) (2023). Levels and trends in child mortality: 2023 report. In: UNICEF [online database] (https://data.unicef.org/resources/levels-and-trends-in-child-mortality-2024/, accessed 12 December 2024).
- WHO (2020). NCD Data Portal: Myanmar [online database]. Geneva (https://ncdportal.org/CountryProfile/GHE110/MMR, accessed 12 December 2024).
- WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division (2023). Trends in maternal mortality 2000–2020. Geneva: WHO (https://www.who.int/publications/i/item/9789240068759, accessed 12 December 2024).
- WHO (2023a). Number of confirmed malaria cases.
 - (https://www.who.int/data/gho/data/indicators/indicator-details/GHO/number-confirmed-malaria-cases)
- WHO Data [website] (2024). Health data overview for the Republic of the Union of Myanmar (https://data.who.int/countries/104, accessed 12 December 2024).
- WHO (2024a). Expanded Programme on Immunization (EPI) factsheet 2024: Myanmar. Geneva

- (https://www.who.int/publications/i/item/myanmar-epi-factsheet-2024, accessed 12 December 2024).
- WHO South-East Asia: Myanmar (2024b). Decreasing zero-dose children threefold amidst pandemic and political unrest in Myanmar. New Delhi (https://www.who.int/myanmar/news/feature-stories/detail/decreasing-zero-dose-children-threefold-amidst-pandemic-and-political-unrest-in-myanmar, accessed 12 December 2024).
- WHO Data [online database] (2024c). Prevalence of stunting in children under 5 (%) (https://data.who.int/indicators/i/A5A7413/5F8A486, accessed 12 December 2024).
- WHO (2024d). Global dengue surveillance [online database] (https://worldhealthorg.shinyapps.io/dengue_global/, accessed 12 December 2024).
- WHO South-East Asia (2024e). Myanmar acute watery diarrhoea / cholera outbreak external situation report, 7th edition. New Delhi: WHO Health Emergencies Programme https://cdn.who.int/media/docs/default-source/searo/whe/him/20241120_mmrawdsitrep.pdf?sfvrsn=155e450c_3&download=true, accessed 12 December 2024).
- WHO. (2024f). Global tuberculosis report. Geneva https://iris.who.int/bitstream/handle/10665/379339/9789240101531-eng.pdf?sequence=1, accessed 12 December 2024).
- WHO Global Health Expenditure Database [online database]. (2024g). National Health Accounts (NHA) country profile database. Geneva (https://apps.who.int/nha/database/country_profile/Index/en, accessed 12 December 2024).
- World Bank Group [website]. (2024). Myanmar economic monitor: livelihoods under threat (English). (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099061124195517221/p5006631cca59607d182041fae76ab566cc, accessed 12 December 2024).