



World Health  
Organization

Libya

# LIBYA ANNUAL REPORT 2023







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# **LIBYA ANNUAL REPORT 2023**

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## Acronyms and abbreviations

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<b>AFP</b>	acute flaccid paralysis
<b>DHIS2</b>	district health information software 2
<b>EMFLU- 2</b>	Eastern Mediterranean Flu Network 2
<b>EMTs</b>	emergency medical teams
<b>EPHS</b>	Essential Package of Health Services
<b>EPI</b>	Expanded Programme on Immunization
<b>EWARN</b>	WHO's Early Warning and Response Network
<b>HIS</b>	health information system
<b>IDPs</b>	internally displaced persons
<b>IDSR</b>	integrated disease surveillance and response
<b>IHR</b>	2005 International Health Regulations (2005)
<b>IPC</b>	infection prevention and control
<b>MHPSS</b>	mental health and psychosocial support
<b>MMR</b>	measles, mumps and rubella
<b>NCDC</b>	National Centre for Disease Control
<b>NCDs</b>	noncommunicable diseases

<b>NITAG</b>	National Immunization Technical Advisory Group
<b>nOPV2</b>	novel oral poliovirus vaccine type 2
<b>OCHA</b>	United Nations Office for the Coordination of Humanitarian Affairs
<b>OPV</b>	oral polio vaccine
<b>PLHIV</b>	people living with HIV
<b>PHC</b>	primary health care
<b>RCCE</b>	risk communication and community engagement
<b>RSV</b>	respiratory syncytial virus
<b>SARI</b>	severe acute respiratory illness
<b>SDGs</b>	Sustainable Development Goals
<b>TB</b>	tuberculosis
<b>UHC</b>	universal health coverage
<b>UNICEF</b>	United Nations Children Fund
<b>UNSDCF</b>	UN Sustainable Development and Cooperation Framework
<b>VDPV2</b>	vaccine-derived poliovirus 2
<b>WHO</b>	World Health Organization



# Foreword

## Dr Ahmed Zouiten

WHO Representative in Libya

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Just two months into my role as WHO Representative in Libya, I was stunned by the flash flooding and disaster that followed. Although I've had the privilege of collaborating with numerous countries during major emergencies, this disaster was exceptional in my experience. As Libyans aspired toward a brighter future, tragedy struck in late 2023 with a natural disaster of unprecedented proportions. On 10 September, Tropical Storm Daniel arrived, unleashing the deadliest flooding Libya had witnessed in over a century. A relentless barrage of wind and rain led to the catastrophic collapse of two dams, unleashing torrents of water that engulfed homes, businesses, hospitals and roads.

In the face of such devastation, WHO, in close collaboration with the Ministry of Health and local authorities, swiftly rallied to provide assistance and advocate for a comprehensive approach that addressed both the immediate relief efforts and the long-term task of rebuilding and fortifying the health system's resilience. In partnership with health authorities, WHO worked to ensure the delivery of essential health services, medical supplies, and care to those affected. Our efforts aimed not only at restoring the functionality of damaged health facilities but also at bolstering disease surveillance and control measures, especially for the tens of thousands displaced by this calamity.

The timing of this disaster could not have been worse, exacerbating an already precarious situation. Libya's health system was grappling with significant challenges characterized by inadequate infrastructure, limited medical resources, and a shortage of skilled health



care professionals. Accessibility issues further compounded the difficulties, particularly in remote areas where health care delivery remained a daunting challenge.

WHO steadfastly commits to advancing universal health coverage (UHC), in partnership with Libyan health authorities. We recognize that access to universal health care is not a luxury but a fundamental necessity for all citizens, especially during times of crisis and upheaval.

Having witnessed the devastation wrought by the floods firsthand, I can attest to the catastrophe's magnitude and the profound trauma experienced by the citizens. The people of Libya have lived in a state of instability for too long, a situation that has greatly impacted their mental health; these floods have further compounded this trauma. Recognizing this, we have prioritized access to mental health and psychosocial support services alongside primary health care to address the

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**“ Although I've had the privilege of collaborating with numerous countries during major emergencies, this disaster was unparalleled in my experience. ”**

mental health needs of Libyan communities.

Prior to this disaster, WHO initiated a pilot project to introduce mental health services in 30 primary health care facilities and 30 schools across 18 municipalities in Libya. Currently, dedicated health care professionals offer mental health and psychosocial support services across these municipalities. In response to the floods, WHO has further supported the establishment of specialized mental health clinics staffed by experts, aimed at providing immediate assistance to those deeply traumatized by the disaster.

In 2023, we wanted to ensure that primary health care was strengthened, not just in response to emergencies, but as the cornerstone of a sustainable health system for UHC, and that strategies and policies were developed to provide optimal care for all. Publishing the STEPS survey, which collects data on noncommunicable diseases (NCDs) risk factors, marks a significant step in this direction.

Looking ahead, WHO remains committed to strengthening Libya's health system and combating NCDs. The importance of such evidence-based research is immeasurable and

will contribute to targeted interventions and policies to promote health and well-being.

Acknowledging every group, person and community contributing to this work's viability is impossible. Still, I extend my deepest gratitude to all our donors and partners whose unwavering support has enabled WHO to make meaningful strides in our mission. I want to thank the WHO staff whose commitment to their roles is outstanding, and their dedication never ceases to impress me. Lastly, I commend the Libyan Ministry of Health, the health authorities and their local communities. They have displayed the highest level of determination, resilience and strength, which makes me proud to work together. I am hopeful that 2024 will bring peace and stability. Together, we will continue to work tirelessly to rebuild and safeguard the health and well-being of all Libyans.



# Executive summary

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In 2023, the World Health Organization (WHO) remained steadfast in its commitment to rebuilding and enhancing Libya's health care infrastructure amidst various challenges. As the country faced humanitarian, environmental, and political upheavals, WHO effectively responded to the needs arising from tropical Storm Daniel and the subsequent floods in eastern Libya. This year was pivotal, with a focus on emergency responses, advocating for robust mental health resources and improving disease surveillance.

## Response to Storm Daniel and floods

Following the catastrophic impact of Storm Daniel, WHO rapidly activated its incident management system, enabling the prompt deployment of medical teams and essential supplies to the affected regions of eastern Libya. Comprehensive operational plans were put in place to restore health care services swiftly and address the immediate health needs of the population.

## Health system support

In collaboration with Libya's ministry of health and covering all districts and municipalities, WHO led

initiatives to strengthen the national health care system. Efforts were focused on equipping health care facilities, enhancing workforce capacity, and advocating for essential health services. Despite numerous challenges, significant progress was made towards establishing a resilient foundation for improved health care delivery across the nation.

## Health information system

WHO continued to advance the health information system (HIS) work plan to improve data quality, analytics, and the utilization of information for decision-making across all health intervention levels. After years of disruptions due to political instability and fragmented governance, significant efforts were made to expand and integrate systems such as the District Health Information Software (DHIS2), and to use electronic tools for standardized registration of vital statistics. The WHO's Health Information Management Unit continued to provide crucial technical support, fostering a unified HIS with systematic data reporting and the production of information for evidence-based decisions.





### Humanitarian-development transition

Amid ongoing political uncertainty, WHO and its United Nations (UN) counterparts made a strategic transition from emergency relief to long-term recovery efforts. Flexibility in planning and funding mechanisms was emphasized to adapt to the evolving landscape and prepare for potential emergencies.

### Response to TB and leprosy

A significant focus was placed on enhancing tuberculosis (TB) diagnostic and treatment services, with advocacy for free access for all residents. Collaborative initiatives aimed at improving case detection and treatment success rates were undertaken alongside efforts to strengthen TB management protocols and adopt newer, more effective treatment regimens. Additionally, collaboration with the National Leprosy Control Programme underscored the ongoing need to improve case detection through specialized training.

### Mental health and psychosocial support

Recognizing the increased demand for mental health and psychosocial support (MHPSS) services post-crisis, WHO deployed multidisciplinary teams and provided consultations to address the pressing mental health needs. Capacity-building initiatives and coordination with partners underscored WHO's dedication to enhancing MHPSS services in Libya.

### Going forward

WHO's comprehensive approach in 2023—spanning emergency response, disease control, mental health support, and health system strengthening—highlights its ongoing commitment to addressing the multifaceted health challenges in Libya. Continued collaboration with governmental and nongovernmental stakeholders and flexible funding mechanisms will be crucial for sustaining progress towards a resilient and equitable health care system in the country.



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# Milestones in 2023



WHO and the Ministry of Health adopt the **joint operational plan** for 2024–2025

**Nov  
2023**



**Releasing** the results of the STEP survey on the prevalence of noncommunicable diseases in the COVID-19 context

**Dec  
2023**



## Storm Daniel

caused Libya's deadliest flooding for over a century, leading to the collapse of two dams and subsequent catastrophic flooding

**Sep  
2023**



WHO launched the **Patient Safety** Friendly Hospital Initiative in Libya

**May  
2023**



WHO, funded by the European Union, launched the project 'A Vision for **tuberculosis in Libya**: building the foundation for a sustainable response' to enhance the overall efficacy of the TB programme in Libya

**Jan  
2023**



An increase in **measles cases** in Libya were reported, especially in the municipalities of the south and west

**March  
2023**

# WHO's response in 2023

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Throughout 2023, WHO continued to support national efforts to rebuild Libya's health care system. The WHO's response operations reached all 22 districts and 102 municipalities in the country. The WHO's network of field coordinators collaborated with local health authorities and communities to assess health needs, establish priorities, monitor the delivery of supplies, and report back to the WHO's office in Tripoli.

Throughout the year, WHO worked with the Ministry of Health to agree on health priorities, set work plans, and implement health activities, focusing solely on humanitarian needs, in line with its commitment to neutrality and impartiality.

In late 2022, following an analysis of the changing context and needs in Libya, the UN decided to transition from a humanitarian approach to the humanitarian-development-peace nexus. This shift,

prompted by the ongoing stability in the country, led to the deactivation of humanitarian sectors in Libya. UNOCHA reduced its presence, and WHO, along with other UN agencies and partners, began transitioning from emergency programming to longer term recovery and development efforts.

Given the ongoing political uncertainty, WHO and other partners advocated for a cautious approach, careful planning, and continued access to flexible funding to enable them to respond in the event of a sudden-onset emergency.

## Storm Daniel and the floods in eastern Libya

On 10 September 2023, Tropical Storm Daniel struck the eastern coast of Libya with torrential rains, flash floods, and strong winds, affecting multiple cities and towns in the districts of Derna, Al-Jabal Al-Akhdar and Al-Marj. The storm's impact was devastating, destroying homes, public





facilities, infrastructure, and roads, and leaving the areas without basic services. Derna, the most affected city, suffered massive destruction and significant loss of life.

Official figures for the catastrophe include a total of 5702 casualties and approximately 3000 missing persons. Notably, 104 health workers were among the casualties.

Storm Daniel was a sudden-onset emergency occurring in a very fragile and vulnerable context: the health system in the northeastern region of Libya faced a combination of inadequate infrastructure, scarce medical resources, accessibility issues, gaps in workforce capacity, and lack of coordination among health entities. Furthermore, due to the shift to the development approach, the humanitarian sectors in Libya had been deactivated, and no coordination mechanism was in place.

Two days after the storm, WHO graded the emergency and activated the incident management

system, repurposing its staff in Tripoli and field staff across the country to support the response to the floods. It rapidly deployed additional support to the eastern region. The WHO sub-office in Benghazi and eight field coordinators deployed in the areas of Al Bayda, Al Marj, Shahat, Soussa, Derna and Tobruk managed the WHO's response and regularly provided real-time information on the humanitarian situation.

While raising funds to support the emergency response, WHO designed and implemented an operational response plan based on the findings of field observations and a rapid assessment conducted immediately by the WHO field staff at 78 health facilities, assessing functionality, infrastructure condition, medical equipment, accessibility, and impediments to service delivery. This response resulted in resources being airlifted from Dubai hub, distributed throughout the affected areas, and staff trained in specific skills to deliver appropriate health care.



# Health system strengthening

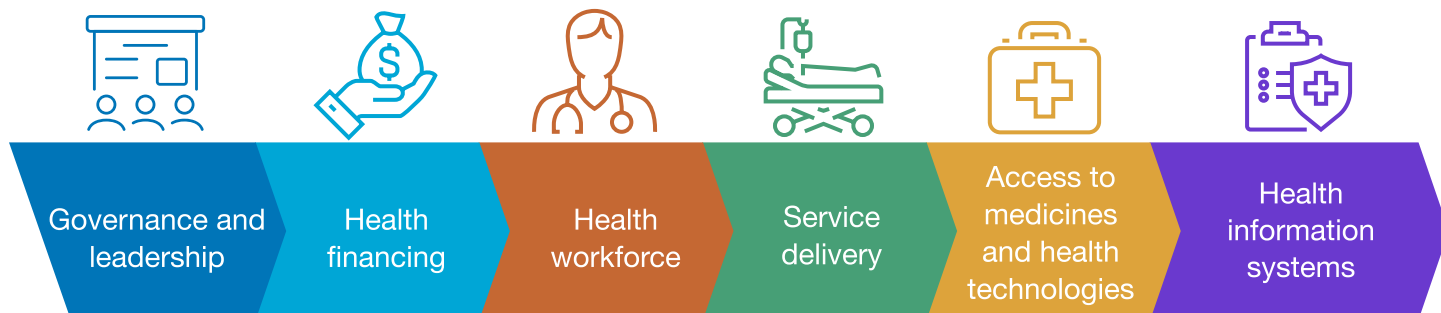
In recent years, Libya's health care system has faced significant challenges due to political instability, conflict, and economic downturns. Amid these challenges, WHO has actively supported Libya's efforts to strengthen its health system. WHO's health system strengthening initiatives in Libya cover a range of interventions to enhance the resilience, accessibility and effectiveness of health care services nationwide.

These efforts align with the six pillars of health system strengthening: governance and leadership, health financing, health workforce, service delivery, access to essential medicines and health technologies, and health information systems.

Additionally, WHO and the Ministry of Health established a national guideline for optimally allocating health workforce resources at primary health care facilities. This guideline, informed by the Workload Indicators of Staffing Need assessment, aims to distribute health care personnel based on workload demands equitably. Its implementation has significantly enhanced service accessibility and quality across various regions, marking a crucial advancement in the national health care strategy.

Parallel to these efforts, WHO supported the validation of the primary health care essential package of health services intervention list. This critical task, complemented by a comprehensive

## Six pillars of health system strengthening



Building on this foundational work, in 2023, Libya's health care system entered a transformative phase, driven by collaborative efforts between WHO and the Ministry of Health. Together, they launched strategic initiatives to bolster primary health care services and enhance workforce capacity. These efforts established a solid foundation for improving health outcomes across the country, marking a significant milestone in the ongoing partnership.

WHO and the Ministry of Health led several initiatives in 2023 to strengthen Libya's health care system. A key focus was developing comprehensive job descriptions for primary health care professionals, including nurses, midwives, general practitioners, and family physicians. These descriptions, crafted during a consensus workshop attended by 22 national experts, define clear roles and responsibilities, ensuring streamlined service delivery within primary health care facilities.

training workshop on cost estimation methodologies using the WHO's One Health tool, aims to enhance health care service provision across Libya. The validation process involved key stakeholders from the Ministry of Health, the Primary Healthcare Institute, and the National Centre for Disease Control (NCDC), aligning with national health care objectives and standards.

WHO and the Ministry of Health expanded the implementation scope of the validated intervention list to include three additional municipalities and 15 primary health care facilities. This expansion facilitates the evaluation of feasibility and efficacy in diverse contexts.

Through these initiatives, WHO and the Ministry of Health have laid a robust foundation for the nationwide adoption of the Essential Package of Health Services, advancing the health and well-being of the Libyan population.



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OVERPACKING  
OVERPACK

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Item NO. 3

High Flow Respiratory Ventilator & accessories  
Batch NO. 8082200  
19 Box (Inventor) + 19  
Box (Accessories) on 1  
pallet

# Reproductive, maternal and child health

In 2023, Libya, in collaboration with WHO, advanced reproductive, maternal, and child health services at the primary health care (PHC) level. Together, they developed comprehensive reproductive health guidelines specifically tailored for implementation at the PHC level, serving as a framework to enhance service quality and accessibility nationwide. Concurrently, in partnership with Libya's Ministry of Health, WHO conducted targeted capacity-building initiatives and organized seven training workshops.

These workshops equipped 150 nurses from various regions of Libya with advanced nursing skills pertinent to reproductive health at the PHC level, aiming to enhance their capabilities in providing specialized care.

Additionally, the training programme extended to senior nurses, equipping them with essential leadership and management skills crucial for navigating challenges, particularly in conflict and emergency situations.



7

training workshops were conducted by the Ministry of Health and WHO to enhance reproductive health at the PHC level



150

nurses from various regions of Libya were trained on advanced nursing skills to enhance their capabilities in providing specialized care



# Universal health coverage

In Libya, the pursuit of UHC remains a critical objective amid challenges stemming from political instability and infrastructure limitations. Central to this endeavour is the recognition of primary health care (PHC) as a cornerstone in achieving equitable access to quality health care services for all citizens. In this context, the collaborative efforts between the Ministry of Health and WHO have been instrumental.

Technical guidance provided by WHO has accelerated progress towards UHC by emphasizing the pivotal role of PHC. Through expertise, evidence-based recommendations, and capacity-building initiatives, WHO has supported the Ministry of Health in developing and implementing effective strategies to bolster PHC services, such

as introducing WHO HEARTS modules for the management and treatment of cardiovascular disease at the PHC level. Consensus workshops were organized in Tripoli, Benghazi, and Sabha with experts from the PHC Institute, the NCDC, academic institutions and members of the Libyan Cardiac Society.

The validation of the HEARTS package modules was followed by a series of capacity-building workshops, involving health care workers such as health facility managers, physicians, nurses, and pharmacists. With over 300 staff trained, the Ministry of Health will be able to successfully pilot the package to reduce the burden of cardiovascular diseases in the country, thereby advancing Libya's UHC agenda.

## Essential Package of Health Services (EPHS)

The Essential Package of Health Services (EPHS) forms the bedrock of PHC services in Libya, ensuring the accessibility of essential health care interventions to all citizens. Recently, WHO Libya collaborated closely with the Ministry of Health to finalize a comprehensive list of interventions constituting the EPHS in 2022. This led to a series of four national workshops

in 2023, where stakeholders from across the country converged to reach a consensus on the definitive list of interventions. This collaborative effort culminated in the official validation of the list by the Ministry of Health's PHC Institute, marking a significant milestone in Libya's journey toward strengthening PHC services.

The upcoming piloting of the validated EPHS in 30 PHC facilities across Libya signifies a substantial stride towards achieving UHC.



# Expanded Programme on Immunization

Immunization is a cornerstone of public health, preserving millions of lives annually and serving as a fundamental human right. Its ability to prevent illness and premature death underscores its significance in bolstering overall population health. Immunization also drives economic prosperity by reducing health care expenditures and societal burdens. For Libya, sustaining immunization efforts is crucial for fostering resilient communities and health equity. This part of the report outlines the activities carried out in 2023 under the Expanded Programme on Immunization (EPI), including outcomes of the vaccine availability assessment, a discussion on the functioning of the National Immunization Technical Advisory Group (NITAG), and a review of vaccine-preventable disease surveillance.

## Vaccine availability assessment

Over the first nine months of 2023, a period during which vaccine availability was assessed across the country, the EPI in Libya grappled with intermittent stockouts of crucial vaccines (Fig. 1), particularly

the oral polio vaccine (OPV) and the measles, mumps and rubella (MMR) vaccine (Fig. 2). Twenty stockouts of the OPV were experienced in the first two quarters of the year, followed by a substantial increase to 112 stockouts in the third quarter, with the western region recording the majority of these stockouts.

Similarly, the MMR vaccine encountered notable shortages, with 29 stockouts recorded in the third quarter alone. These instances of stockouts highlighted the pressing need for more robust supply chain management and procurement strategies within the immunization programme.

WHO maintained its monitoring of vaccine availability throughout Libya in 2023. The field coordinators conducted regular assessments of the accessibility of eight crucial children’s vaccines as a typical component of their monitoring of the health situation in Libya’s municipalities. The data were transmitted through an online reporting platform to the WHO country office in Tripoli, which then vetted and analyzed the information.

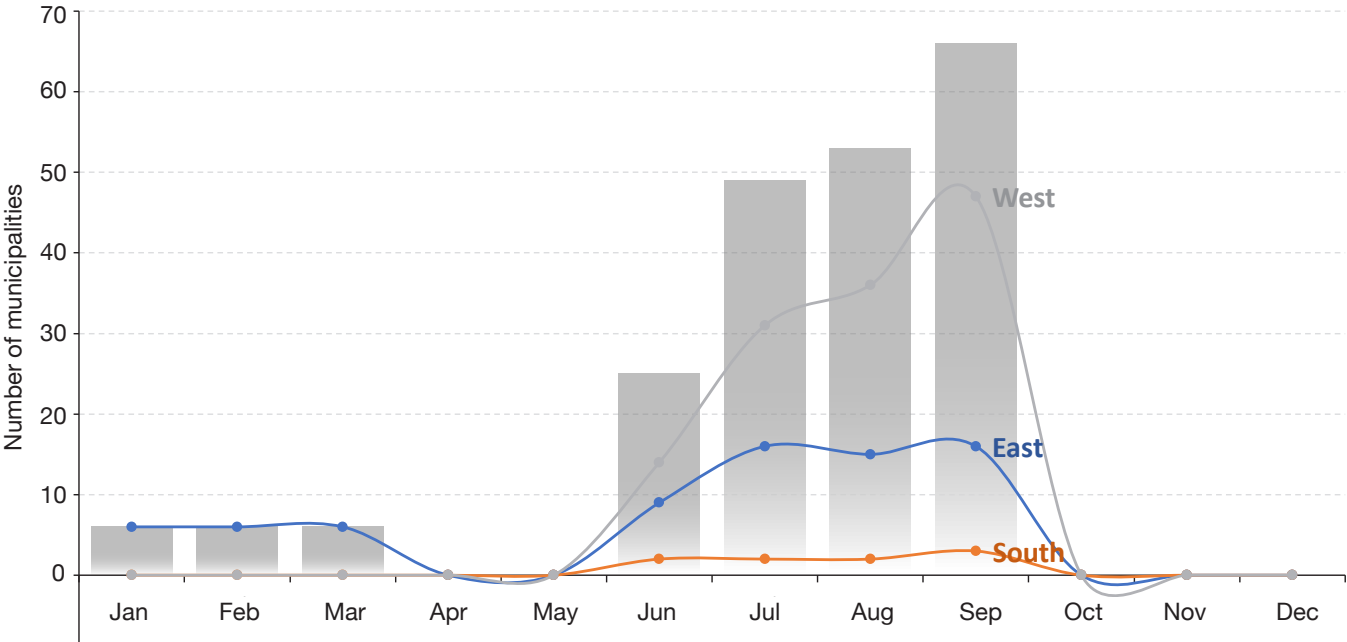


Fig. 1. Evolution of the number of municipalities in Libya reporting at least one vaccine stockout, 2023

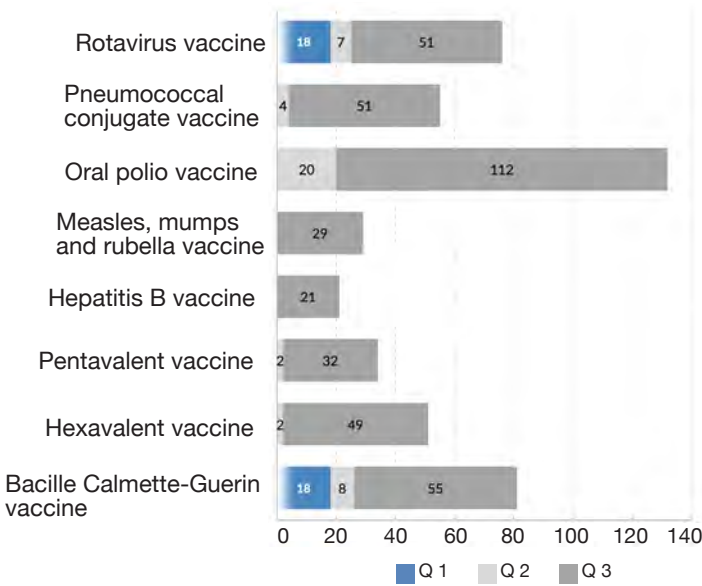


Monthly reports were then generated by WHO and shared with health authorities. In accordance with WHO’s analyses, the Government allocated sufficient funding in mid-2023 to acquire vaccination supplies until the middle of 2024. WHO will advocate for consistent funding to ensure the acquisition of vaccination supplies and safeguard the well-being of children in Libya.

**EPI data management**

WHO continued its support to improve EPI data management systems and strengthen effective vaccine management practices. Five back-to-back training workshops on EPI data management systems were organized, coordinated and conducted.

One hundred and fifteen (115) municipality supervisors/data managers were trained successfully and equipped with the required



**Fig. 2. Number of times stockouts were reported per vaccine type and quarter, 2023**

technical skills as part of ongoing efforts to strengthen and improve routine immunization data management systems.

### Supplementary immunization activities

To close the immunity gaps, particularly among susceptible children and high-risk population groups due to several contributing factors, WHO supported the National Centre for Disease Control (NCDC) at the Ministry of Health in developing bottom-up micro-plans to carry out multi-intervention vaccination campaigns against polio and measles disease, in addition to distributing vitamin A. 1.4 million children aged 0–6 years will be vaccinated during this campaign, which is scheduled to be carried out in April-May 2024.

To ensure that the country has completed its readiness to roll out the campaign on time with high-quality indicators, WHO conducted a 2-day training workshop aiming to assess the country's readiness, identify existing gaps in preparedness, and subsequently provide the necessary technical and financial support to fortify the effectiveness of the impending nationwide campaign. A standardized WHO supplementary immunization activities readiness assessment tool was used.

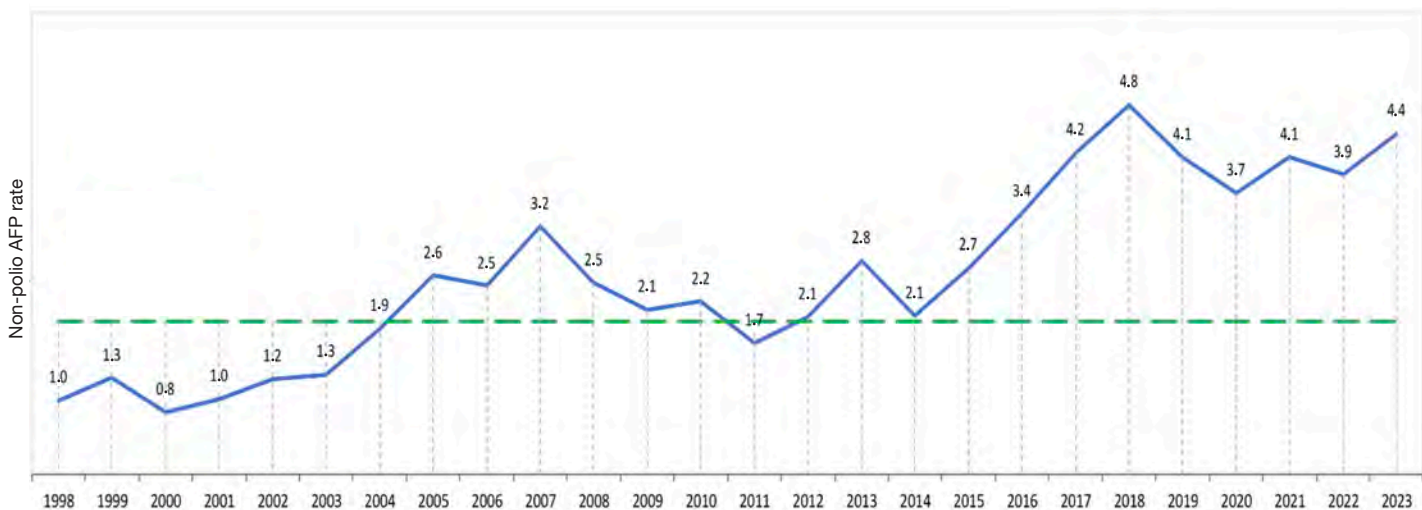
The readiness tool provided a comprehensive assessment of the campaign's four major components: risk communication and community engagement (RCCE), cold chain and logistics, planning and coordination, and monitoring and evaluation. Among these, the RCCE component was found to have the lowest level of readiness.

As early preparation for the upcoming multi-intervention (polio, measles, and vitamin A) vaccination campaigns, 1350 safety boxes for the safe disposal of syringes have been delivered to the National Centre for Disease Control (NCDC), with four freezers to increase vaccine cold chain storage capacity at the sub-national level.

### National Immunization Technical Advisory Group (NITAG)

National Immunization Technical Advisory Groups (NITAGs) are multidisciplinary groups of national experts responsible for providing independent, evidence-informed advice to policy-makers and programme managers on policy issues related to immunization and vaccines. After nearly 20 years of the same NITAG leadership, Libya has established a completely new NITAG in accordance with WHO guidelines for a well-





**Fig. 3 Non-polio AFP rates in Libya, 1998–2023**

functioning NITAG. WHO has provided extensive support to the newly established NITAG, including training, capacity-building activities, and conducting maturity assessments to identify areas for improvement. Improvement plans have been developed to address these gaps. With support from the WHO Regional Office for the Eastern Mediterranean, eight members were trained on the WHO Evidence to Recommendation toolkit (EtR), while an additional five members received training on vaccinology in South Africa.

### Vaccine-preventable disease surveillance activities

#### Polio

Libya has been polio-free since 1991. However, the presence of internally displaced persons (IDPs) and refugees and the ongoing influx of migrants from polio-infected countries place it at significant risk for imported polioviruses and the circulation of vaccine-derived poliovirus type 2 (VDPV2). There has been an increase in the global prevalence of VDPV2 in children born after April 2016, when the OPV2 vaccine was removed from routine



**115**

cases of AFP were reported in 2023



**1350**

safety boxes for the safe disposal of syringes have been delivered



**88**

surveillance officers/hospital focal points trained on AFP surveillance



**5**

back-to-back training workshops on EPI data management systems were coordinated and conducted



immunization in certain African countries. Globally, there were 308 reported cases of VDPV2 in 2023. It is increasingly prevalent in the African and Eastern Mediterranean regions. In line with the Eastern Mediterranean Region, country readiness for any potential VDPV2, the required technical support was provided to complete Libya's readiness to use novel oral poliovirus vaccine type 2 (nOPV2).

In 2023, Libya met all nOPV2 readiness verification requirements and was verified for the use of nOPV2. Regarding polio transition, the responsibility for polio essential functions has been taken over by the Government, and WHO support is limited to the cost of sample transportation from Libya to Tunisia. Libya continued its AFP surveillance and polio immunization activities with AFP surveillance performance indicators above acceptable levels. A total of 115 cases of AFP were reported in 2023, a 14% increase from the 101 cases reported in 2022. This increase is likely the result of better surveillance and reporting.

In addition to coordinating the collection and delivery of AFP specimens to the accredited poliovirus laboratory in Tunisia for testing, WHO provided stool specimen kits to the national AFP surveillance programme and trained 88 surveillance officers and hospital focal points on AFP surveillance. Throughout the year, WHO submitted weekly AFP surveillance reports to WHO.

To ensure early detection and effective response to any potential wild polioviruses or cVDPV2, a training workshop on the polio outbreak simulation exercise was successfully conducted. A total of 24 participants from existing public health programmes have been well-trained and equipped with the required technical skills. The AFP surveillance network in Libya needs to be extremely vigilant to detect potential VDPV2 and wild poliovirus outbreaks and act quickly to contain them within 120 days. The National Polio Outbreak Preparedness and Response Plan was updated in line with the Regional Office's recently updated guidelines.

The gold standard for AFP surveillance quality is determined by two indicators: at least two non-

polio AFP cases per 100 000 children under the age of 15 reported annually, and at least 80% of AFP cases with two adequate stool samples. These two indicators can be combined into a single indicator of AFP surveillance quality: a non-polio AFP rate of at least two, and specimen adequacy of at least 80%. In 2023, the non-polio AFP reporting rate for Libya was 4.4 per 100 000 children under the age of 15 (as against 3.9/100 000 children aged under 15 in 2022) (Fig. 3), and the specimen adequacy was 99% (as against 100% in 2022). This suggests that the surveillance system is capable of detecting cases of polio should they arise.

### **Measles and rubella**

In 2023, the EPI confronted a myriad of challenges, with a particular emphasis on addressing the persistent issues surrounding measles and rubella control. Despite efforts to maintain routine service delivery, insecurity and natural disasters affecting localities like the Derna floods and the presence of hard-to-reach areas hinder access, especially for remote and high-risk populations. Targeting issues persist in both routine and campaign settings, exacerbated by the lack of comprehensive census data and constant population movements.

Delays in the procurement of routine childhood vaccines further impede vaccination efforts, impacting measles and rubella control measures. The influx of migrants and IDPs, often overlooked by outreach programmes, requires urgent attention and support. Securing contingency funds for crisis situations is crucial to ensuring uninterrupted immunization activities.

Moreover, frequent stockouts of measles and rubella kits at the national laboratory undermine effective disease surveillance and response efforts, highlighting the pressing need for comprehensive solutions to address these critical issues. Although Libya is currently in the measles elimination phase, several outbreaks were recorded in 2023 as a result of the above-mentioned challenges.

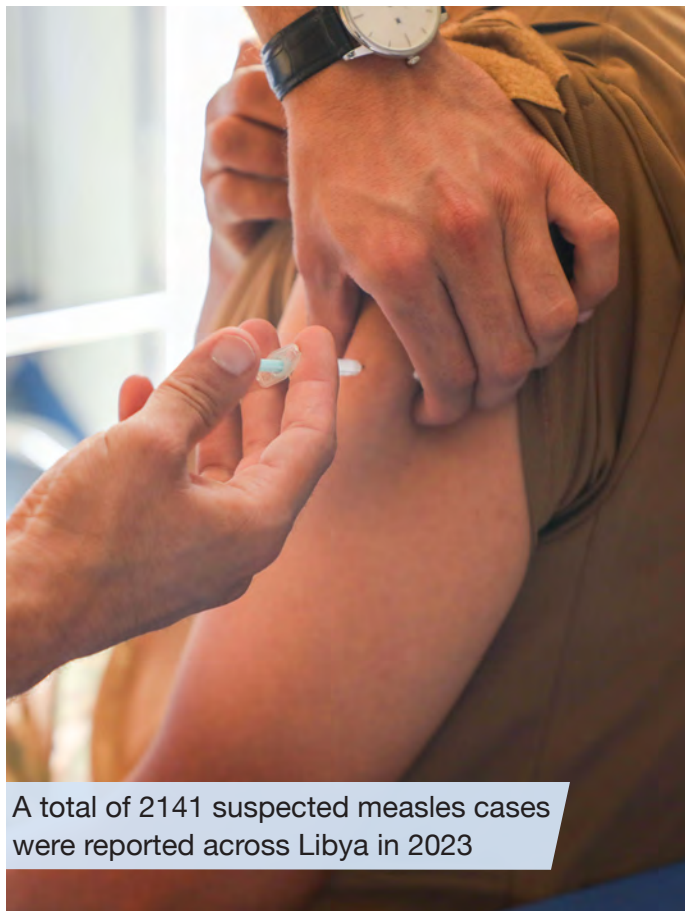
A total of 2141 suspected measles cases were reported across Libya in 2023, a fourfold increase compared with the previous year (533 suspected cases in 2022). This rise is equally attributed to

better reporting as a result of the intensification of routine surveillance following the sporadic measles outbreaks in the country.

Following the emergence of these measles-rubella outbreaks, swift response campaigns were organized to contain the spread of the diseases and mitigate their impact on public health. These campaigns aimed to vaccinate vulnerable populations and bolster immunity against measles and rubella.

Through these coordinated initiatives, the Libyan NCDC-EPI, with the support of WHO, sought to curb the transmission of measles and rubella, safeguarding the health and well-being of communities across affected areas.

Accurate vaccination coverage estimates play a crucial role in guiding disease eradication and elimination efforts. They are also a reliable measure of health system performance.

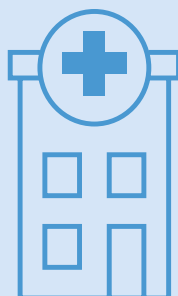


A total of 2141 suspected measles cases were reported across Libya in 2023

## Response to Storm Daniel



In response to the areas affected by storm Daniel in September 2023, a prompt plan was devised and put into action to **enhance EPI services**, conduct post vaccine-preventable surveillance, and support catch-up vaccination services



Out of the **33** health facilities assessed, it was found that nine of them, or **27%**, need immediate assistance in order to resume their immunization services



**9000** infants in the evaluated regions were at risk of not receiving their regular vaccinations



The evaluation of **human resources**, and the availability of vaccines have been assessed



WHO has provided consistent support and oversight for **routine vaccination services** and vaccine-preventable disease surveillance activities



WHO planned for necessary **cold chain** equipment procurement like freezers and data loggers

# Laboratories and diagnostics



Throughout 2023, WHO assessed all 42 of Libya's COVID-19 laboratories. In the first quarter of the year, 36 out of 42 COVID-19 detection laboratories reported their data. Eighteen (50%) of these laboratories were fully functional, six (17%) were partially functional, and 12 (33%) were non-functional. Thirty-three laboratories (92%) were equipped with RT-PCR machines, while three (8%) reported unavailable machines.

Twenty (20) laboratories (56%) reported having available Cepheid GeneXpert machines, with 16 (44%) reporting the machines as unavailable.

In collaboration with the NCDC, WHO trained 157 laboratory technicians in laboratory diagnostic

procedures for EWARN priority diseases and the management of laboratory samples. Additionally, 57 laboratory technicians received training on laboratory quality control standards.

WHO supported influenza and COVID-19 laboratories with 10 000 GeneXpert cartridges for the confirmation of four respiratory agents: COVID-19, influenza A, influenza B, and respiratory syncytial virus. Plans for 2024 include training data entry staff in sentinel sites and laboratories on a reporting tool and commencing the use of the Eastern Mediterranean Flu Network (EMFLU-2) as a platform for reporting and data sharing.



## 157

laboratory technicians were trained on laboratory diagnostic procedures for EWARN priority diseases and the management of laboratory samples



## 57

laboratory technicians received training on quality control standards

# Malaria

Libya achieved malaria-free status in 1973. However, in 2021, multiple cases were identified in the country's southern region. While most cases were imported, four patients without a travel history posed challenges in confirming local transmission. With support from WHO, the NCDC is actively investigating the potential presence of vectors in the affected areas.

# HIV

UNAIDS/WHO estimates from 2023 suggest there are approximately 7900 people living with HIV (PLHIV) in Libya, ranging from 7100 to 8700, with 2900 being women over the age of 15. While the National AIDS Programme reported that 5083 individuals received antiretroviral therapy (ART) in 2023, Libya still faces challenges in meeting the 90-90-90 targets.

Libya offers free HIV testing and ART to all residents. However, only four of the country's eight ART centres are fully operational: Tripoli University Hospital, Tripoli Central Hospital, Benghazi Medical Centre, and the Benghazi Centre for Infectious Diseases and Immunology.

The country has fewer than 10 HIV testing centres, and there is a widespread stigma around HIV, affecting even health care workers. Recurring stockouts of critical medications significantly disrupt treatment continuity, leading to increased risks of advanced HIV stages, suboptimal ART combinations, enhanced drug resistance, increased morbidity, and potentially premature mortality among people living with HIV (PLHIV).

The Libyan pharmaceutical management and supply chain is complex, with highly compartmentalized distribution channels that currently fail to meet the needs of PLHIV or health care providers.

Throughout 2023, a total of 153 new cases were confirmed, according to the national malaria focal point at the NCDC. In response, WHO and the NCDC collaboratively developed a strategy to enhance surveillance, laboratory diagnostics and case management. Additionally, in June 2023, WHO facilitated a four-day training session for 63 laboratory technicians from the eastern region to bolster their diagnostic skills.



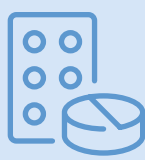
In 2022, WHO met with the Ministry of Health several times to advocate for regular funding for the National AIDS Programme and to align its activities with the WHO's Regional Action Plan on HIV, hepatitis, and STIs. These efforts led to the development and endorsement of the HIV National Strategic Plan for 2023–2027.

WHO also procured enough HIV drugs to treat 3500 adults and 150 children for six months, distributing them across the country. Additionally, WHO supported the screening of patients for both TB and HIV in the NCDC branches and TB centres and helped the national programme conduct prevention of mother-to-child transmission training for 75 key staff and HIV advocacy programmes in various parts of the country.



7900

PLHIV in Libya



5083

individuals received antiretroviral therapy (ART) in 2023



75

staff were trained on prevention of mother-to-child transmission

# Leishmaniasis

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Leishmaniasis has been endemic in Libya for about a century. Zoonotic cutaneous leishmaniasis caused by *Leishmania major* (*L. major*) is endemic in most areas of the country's northwestern region. Its epidemiological pattern is characterized by the eruption of epidemics every 10 years. Since 1971, more than 50 000 cases have been recorded, with an estimated 1 million people at risk. Chronic cutaneous leishmaniasis due to *L. killicki* has recently been confirmed, but its epidemiology remains unclear. Reinfections have been reported in many areas. Visceral leishmaniasis caused by *L. infantum* has been reported sporadically from the northeastern parts of the country, and new foci have also been recently discovered in the southern region. The main vector for zoonotic cutaneous leishmaniasis is *P. papatasi*, while the vectors for visceral and chronic cutaneous leishmaniasis have not yet been determined.

In November 2006, the Libyan Ministry of Health decided to establish a comprehensive programme for leishmaniasis control at the NCDC, with a dedicated budget. The programme aimed to prevent epidemic outbreaks, control the rapid spread of the disease to other areas, and reduce the number of cases by detecting and treating existing cases. The programme successfully reduced the number of cutaneous leishmaniasis cases reported to 3884 in 2007, 1800 in 2008, and 1503 in 2009.

# Rickettsia

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Rickettsia is a diverse group of obligately intracellular, Gram-negative bacteria found in ticks, lice, fleas, mites, chiggers, and mammals. They belong to the genera *Rickettsiae*, *Ehrlichia*, *Orientia*, and *Coxiella*. These zoonotic pathogens cause infections that can disseminate in the blood to many organs. Rickettsia species are responsible for various diseases, including Rocky Mountain spotted fever, rickettsialpox, other spotted fevers, epidemic typhus, and murine typhus. Symptoms may include nausea, vomiting, abdominal pain, encephalitis,

Over the years, the leishmaniasis programme has opened 27 peripheral leishmaniasis clinics in endemic areas. Their responsibilities include providing treatment and medical observation for patients, as well as issuing efficient reports on disease status.

Since 2011, the country's political situation has negatively affected the control programme, which is suffering from a lack of resources and financial support from the Ministry of Health. Additionally, there is a shortage of specialists, including epidemiologists, clinicians, microscopists, and entomologists, which affects the programme's overall activity.

Leishmaniasis has become a major health problem in Libya due to the social and economic impact of cutaneous leishmaniasis and the fatal effects of visceral leishmaniasis. Recently, the NCDC reported new cases of cutaneous leishmaniasis in Turhuna, Alhraba, Ben Walid, the western part of Sirt, and the southern area of Tripoli.

In 2023, the number of recorded leishmaniasis cases in Libya includes 448 cases of cutaneous leishmaniasis and two cases of visceral leishmaniasis, with no deaths reported. The most affected area is Tawergha with 148 cases, which can be attributed to the recent return of displaced populations to their city.

The support from WHO has focused on procuring drugs and training dermatologists in detecting, managing and reporting leishmaniasis.

hypotension, acute renal failure and respiratory distress.

The most significant tick-borne infectious disease in North Africa is Mediterranean spotted fever, endemic in Libya's Green Mountain region, with dogs serving as the primary domestic reservoir.

In 2023, the NCDC recorded 21 cases of rickettsia in the northwestern part of Libya in the Alkums area and approximately 56 cases in Albidaa City in the eastern part of Libya.

# Influenza surveillance

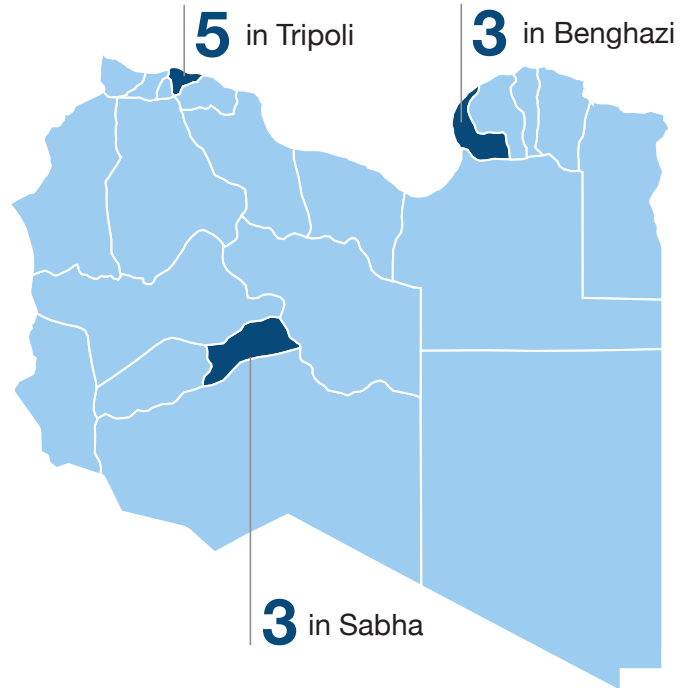


11

Sentinel sites for Libya's integrated disease surveillance system for influenza and COVID-19

In 2023, WHO supported expanding Libya's integrated disease surveillance system for influenza and COVID-19 beyond Tripoli. With this expansion, the number of sentinel sites increased to 11: five in Tripoli, three in Benghazi, and three in Sabha. These sites send weekly specimens from suspected cases to the relevant laboratories. WHO has trained 59 staff members from these sites in integrated sentinel surveillance for influenza and COVID-19. Additionally, three sites specifically for severe acute respiratory illness (SARI) have been established in Tripoli, Benghazi, and Sabha.

In 2023, WHO also supported influenza and COVID-19 laboratories by providing 10 000 GeneXpert cartridges to confirm four respiratory agents: COVID-19, influenza A, influenza B, and respiratory syncytial virus (RSV). In 2024, WHO plans to train staff in data entry at sentinel sites and laboratories on a reporting tool and will start using EMFLU 2 as a platform for reporting and data sharing between sentinel sites and assigned laboratories at the national and regional levels.



# Disease surveillance and response

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WHO's Early Warning and Response Network (EWARN) remains the sole operational disease surveillance system in Libya. EWARN actively monitors 20 communicable diseases categorized into two groups: diseases like measles, which are highly contagious and/or life-threatening and require reporting within 24 hours, and diseases such as acute jaundice syndrome, which are less contagious or life-threatening and may be reported weekly.

The NCDC verifies all alerts within 48 hours, irrespective of the disease category. The data collected from EWARN reporting sites are consolidated, analyzed by the NCDC, and disseminated through weekly epidemiological bulletins.

EWARN's performance standards mandate that at least 80% of received alerts be verified within 48 to 72 hours, and at least 80% of weekly reports be submitted punctually. In 2023, 89% of EWARN alerts in Libya were investigated and addressed within 72 hours, surpassing the set standard. However, only 75% of the reporting sites submitted data regularly, and just 55% provided complete data.

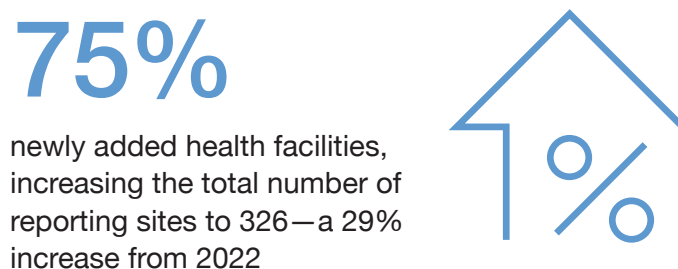
Libya experienced measles outbreaks in several municipalities in 2023, predominantly in the southern regions such as Sabha and Ghat, and in the north in Bani Walid. The NCDC launched local vaccination campaigns to contain these outbreaks and initiated ongoing efforts to bolster herd immunity through a national campaign targeting measles and rubella, focusing on vulnerable age groups, especially school-aged children.

Minor outbreaks of acute respiratory illnesses linked to COVID-19, influenza, and RSV were reported in Garian municipality and its environs, with no fatalities. Following Storm Daniel, Albaida municipality saw a rise in diarrhoeal cases due to water contamination, with over 250 daily cases reported from the affected area. Water testing and patient specimens confirmed the

presence of *Escherichia coli* and amoebiasis. Risk communication and community engagement campaigns focusing on avoiding groundwater, particularly in schools and mosques, helped reduce the cases to normal levels. No cholera cases were reported, and tests for suspected cases returned negative.

In response to a comprehensive evaluation conducted in 2021, WHO continued implementing recommendations to enhance EWARN. The second phase of expansion began in February and March 2023, in collaboration with the NCDC, which included three training workshops for surveillance officers across 75 newly added health facilities, increasing the total number of reporting sites to 326—a 29% increase from 2022.

Additionally, WHO facilitated refresher training for existing surveillance officers, with workshops held in Tripoli and Benghazi, attended by 69 officers, focusing on data validation and the principles of epidemiology in preparation for EWARN's transition to integrated disease surveillance.





WHO supported the NCDC in conducting supervisory field visits targeting 10 municipalities to identify gaps and challenges faced by surveillance officers, linked with low performance indicators. Recommendations from these visits were translated into an actionable work plan. One such recommendation was to conduct orientation sessions for physicians working at reporting sites to improve detection rates and maintain registration accuracy. WHO supported the NCDC in hosting orientation days for Soug Aljuma physicians, attended by 28 physicians, which resulted in increased detection and reporting rates.

WHO also supported the training of 178 laboratory technicians from 10 peripheral public health laboratories on laboratory confirmation of EWARN priority diseases, with eight training sessions held across Tripoli, Benghazi and Misrata. These sessions aimed to enhance the EWARN system and surveillance capabilities in detecting and confirming diseases prone to outbreaks.

In collaboration with the NCDC and the Eastern Mediterranean Public Health Network

(EMPHNET), WHO conducted a Field Epidemiology Training Programme targeting surveillance officers and members of rapid response teams, with 35 participants attending three training modules from 26 August to 14 November 2023.

### **Integrated disease surveillance and response**

In October 2021, all Member States of the Eastern Mediterranean Region committed to establishing integrated national disease surveillance systems by the end of 2025. In December 2023, a consultative meeting facilitated by experts from the Region discussed the availability of suitable electronic reporting tools, with a consensus to adopt RASSED, developed by a local company. An action plan for piloting integrated disease surveillance and response (IDSR) in 10 selected municipalities was developed, with related activities planned for early 2024. An expansion of the integrated disease surveillance to become the national system is also planned for the latter half of 2024.



# Tuberculosis (TB)

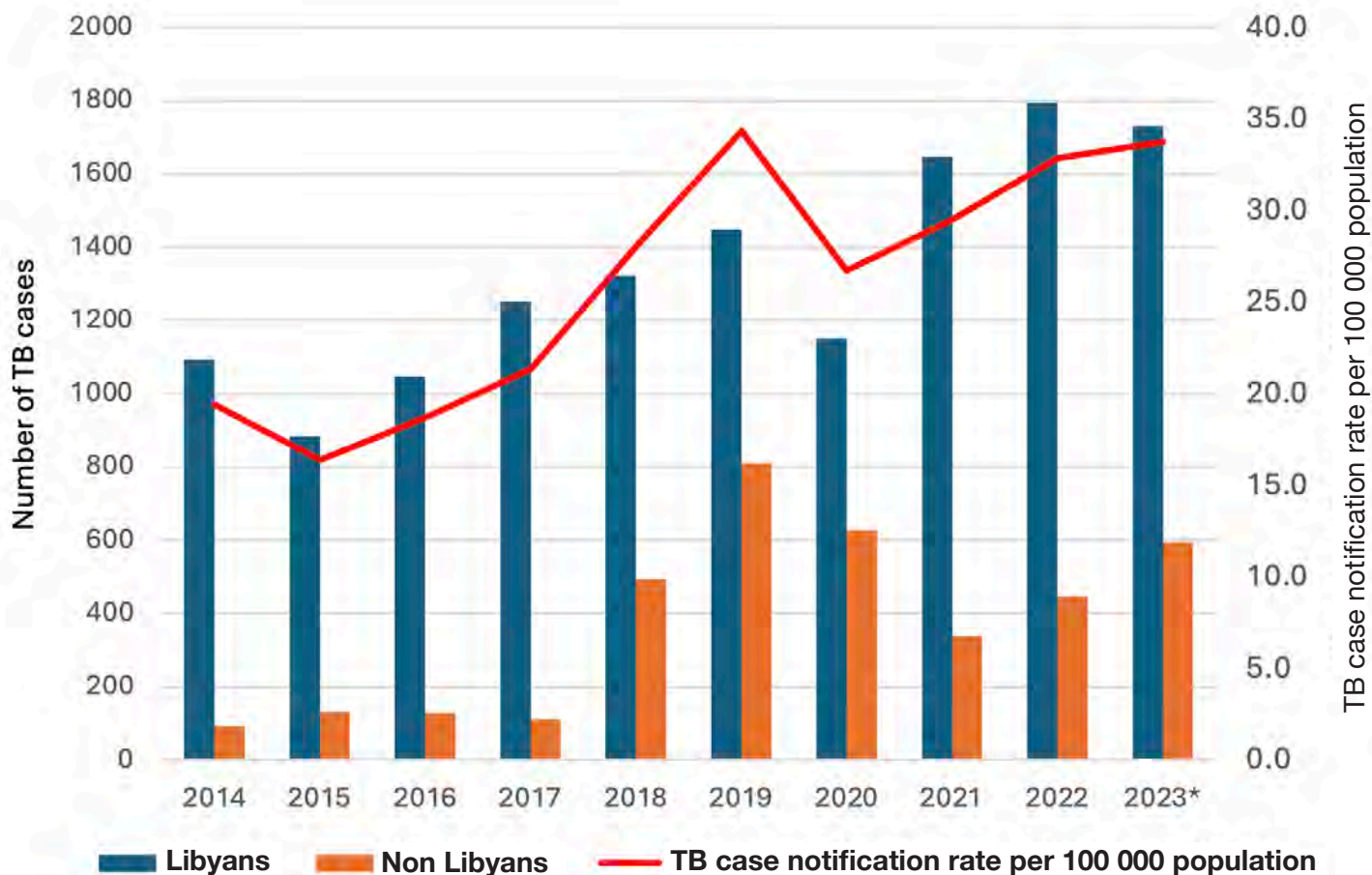
Libya has a moderate burden of TB with an annual incidence of 59 cases per 100 000 population, translating to approximately 4000 cases per year. The WHO-recommended TB diagnostic and treatment services are provided free of charge to all residents of the country. These services are facilitated through the NCDC branches and TB hospitals located across Libya. Currently, there are 27 operational TB units spread throughout the country, providing essential services to patients in need. The GeneXpert testing, recommended by WHO as a rapid diagnostic tool for TB, is accessible in 19 centres across the country.

Additionally, TB culture services are offered in 13 centres, while digital X-ray facilities are available in 23 centres. Furthermore, binocular microscopy, another essential diagnostic tool, is accessible in all 27 operational TB centres throughout Libya. These diagnostic resources play a vital role in the effective detection and management of TB cases nationwide.

Despite receiving support from multilateral donor agencies, the country's efforts to combat TB are hindered by challenges in case detection and notification. According to the Global Tuberculosis Report 2023, the trend in TB case notification has been steadily increasing after recovery from COVID-19, with migrants (non-Libyans) accounting for approximately 25% of the cases notified in Libya (Fig. 4). Preliminary data from the National Tuberculosis Programme show that 2326 cases have been diagnosed and placed on treatment, with the trend in case notification steadily increasing, thanks to continuous support from the European Union. The treatment success rate is a key indicator of an effective TB programme.

In 2021, the success rate for drug-susceptible TB patients in Libya who initiated treatment was 62%. This figure is notably lower than the 92% success rate observed in other countries within the Eastern Mediterranean Region. The major reasons for low





**Fig. 4. TB case notification trend, 2014–2023**

treatment success include pre-treatment loss to follow-up and migrants returning to their countries of origin after diagnosis.

In January 2023, WHO, with funding from the European Union, launched a project to strengthen the TB programme in Libya. This collaborative effort aims to significantly improve TB case detection, treatment success rates, and overall programme efficacy. A cornerstone of the project was a stakeholder consultation workshop held in March 2023, which engaged high-volume PHC centres to optimize referral pathways for suspected TB cases. By December 2023, 47 PHC centres had been identified for streamlined cross-referrals,

and 70 medical officers received comprehensive training. WHO further facilitated the procurement and distribution of essential TB medications and diagnostic tools to the national TB programme.

Additionally, the Arabic translation of the TB compendium was printed and disseminated to all NCDC staff, ensuring access to critical reference materials. To enhance programme management and collaboration, a standardized supervisory checklist was developed to guide supportive supervision visits to 26 functional TB centres. These visits provided on-the-job training for staff, and a dedicated TB programme review meeting involving all TB units fostered further collaboration.



**2326**

TB cases have been diagnosed and placed on treatment



**13**

centres offering TB culture services across Libya



**70**

medical officers received training on TB prevention and care

The programmatic management of drug-resistant TB remains a significant challenge due to limited capacity within the national TB programme. Data reveal that only 18 and 14 drug-resistant patients received treatment in 2022 and 2023, respectively. Furthermore, geographic limitations currently restrict drug-resistant TB services to Tripoli and Benghazi, hindering access for patients in other regions (Fig. 5). To address these concerns, WHO deployed a dedicated consultant and organized a drug-resistant management webinar for relevant

stakeholders. These initiatives aim to enhance knowledge and skills in managing drug-resistant TB. While the national guidelines incorporate TB preventive treatment, implementation remains a hurdle. WHO is actively working to bridge this gap by facilitating capacity-building initiatives for the national TB programme, with a particular focus on adopting newer, shorter isoniazid preventive therapy regimens. This approach aims to improve access to preventive treatment and contribute to a substantial reduction in the overall TB burden within Libya.

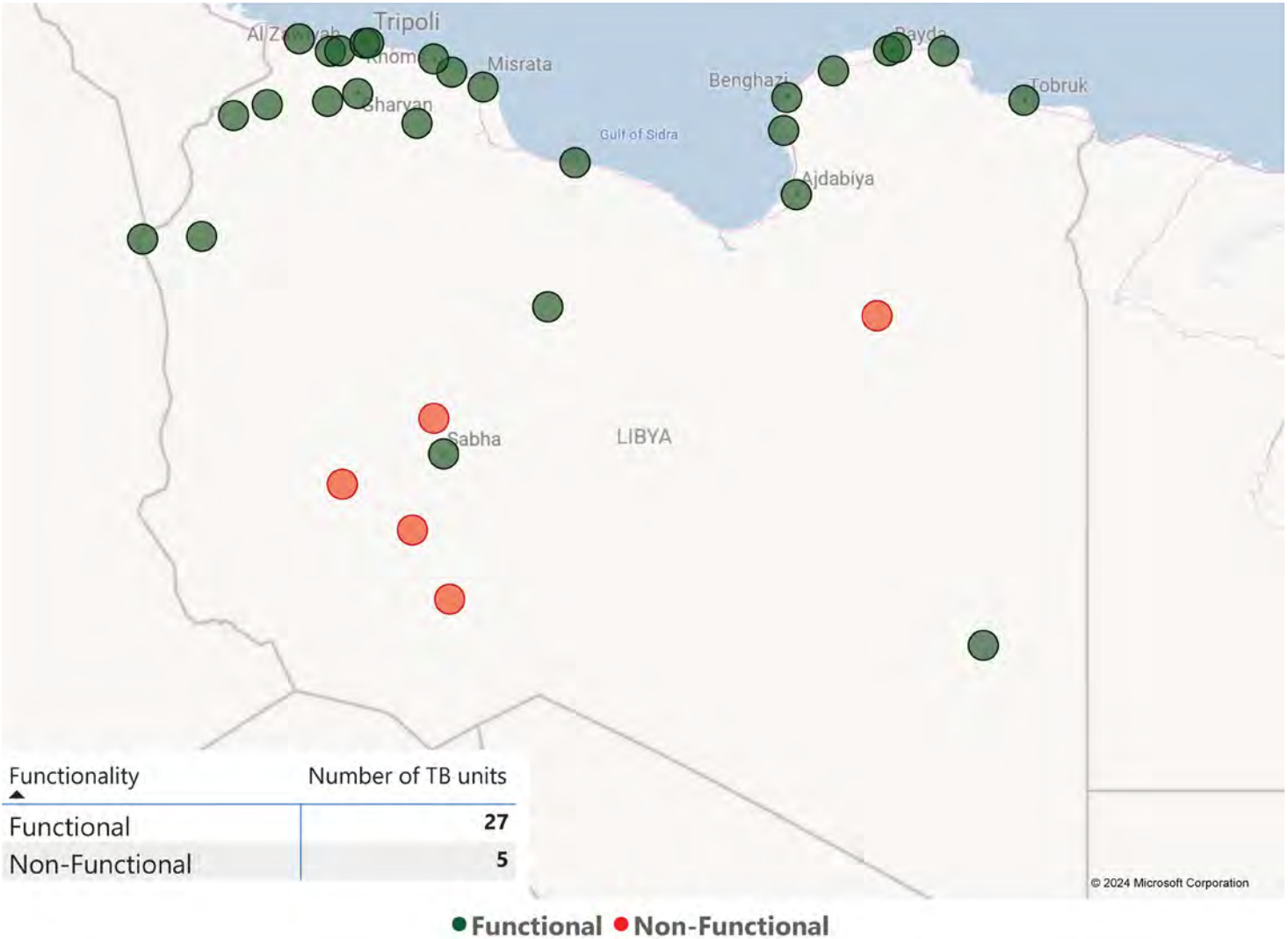


Fig. 5. Geographic distribution of TB units in Libya, 2023

# Leprosy



Over the past three decades, Libya has seen a significant decline in the incidence of leprosy. In the last five years, the number of newly diagnosed cases has fallen below five per year, with just a single case detected in 2023. However, WHO and the National Leprosy Control Programme recognize the need for continued improvement in case detection efforts.

In 2022, a training initiative conducted by WHO and the National Leprosy Control Programme equipped over 100 dermatologists with the skills to diagnose and treat leprosy. While this programme aimed to enhance case detection, the number of identified

cases remained low. Recognizing the crucial role of laboratory diagnostics in leprosy detection, WHO organized a targeted three-day workshop in December 2023 at the Tripoli Dermatological Hospital. This workshop focused on strengthening the capacity of laboratory technicians from various hospitals.

Ten technicians received comprehensive training in sample collection, processing, recording, and reporting procedures. This emphasis on building laboratory expertise is expected to significantly contribute to improved leprosy case detection in Libya.



100

dermatologists equipped with the skills to diagnose and treat leprosy by WHO and the National Leprosy Control Programme



10

technicians received comprehensive training in sample collection, processing, recording and reporting procedures to enhance laboratory diagnostics in leprosy detection

# Emergency care system

The findings from the 2018 joint external evaluation revealed that efforts to strengthen emergency preparedness and operational readiness were limited and fragmented within the structure of the Libyan Ministry of Health. The evaluation identified several deficiencies in Libya's emergency care system, including limited capacity to address antimicrobial resistance, substandard laboratory systems, inadequate emergency operating centres, ineffective risk communications, and vulnerable entry points.

These issues have been exacerbated in recent years by continued sporadic violence, disease outbreaks, and natural disasters, which further weaken the health system, especially in vulnerable areas. In response, WHO has collaborated with the Ministry of Health to enhance emergency management and coordination, disease surveillance, laboratory capacity, disease outbreak response, and emergency care services.

Libya is characterized by protracted emergencies, ongoing civil unrest, political fragmentation,

increased risk of disease outbreaks, and one of the largest migration crises globally. WHO works with the Ministry of Health to provide life-saving medical assistance in municipalities hosting migrants, IDPs, refugees, returnees, and host communities. Given this unique context, conducting regular needs assessments and continuously collaborating with both national and international partners are essential.

Regarding disease surveillance, WHO supported the Ministry of Health in expanding EWARN from 180 sentinel sites in 2021 to 326 sites in 2023. This expansion strengthened Libya's disease surveillance capabilities and paved the way for more sustainable interventions. Following a request from the Ministry of Health, WHO mobilized donor resources and developed a strategy to transition to the IDSR system by 2025.

In alignment with the polio transition and the acceleration of the elimination of vaccine-preventable diseases, WHO has worked closely with the Ministry of Health to assess the country's outbreak preparedness and response capabilities,





including for polio. This collaboration resulted in the development of the National Polio Outbreak Preparedness and Response Plan, which focuses on early detection and effective response. A polio outbreak simulation exercise involving 30 participants from the Ministry of Health and other partners was conducted in 2023.

To strengthen emergency care services, WHO collaborated with the Ministry of Health to assess intensive care units (ICUs) in health care facilities, identifying areas for improvement in infrastructure, equipment, staffing and training. The ICU assessment will be integrated into the upcoming Emergency Care System Assessment, as discussed and agreed upon with the Ministry of Health and WHO Regional Office.

Additionally, 13 workshops were held to enhance the skills and knowledge of 325 health care professionals working in emergency and prehospital centres. These workshops covered essential topics such as infection prevention, prehospital emergencies, and basic and advanced life support techniques. The collaboration between workshop organizers and the Ministry of Health has contributed to the strengthening of Libya's health care sector and the overall enhancement of facilities.

To improve access to services for vulnerable populations, one of WHO's key humanitarian interventions in Libya since 2018 is the deployment of over 20 mobile medical teams across the hardest-to-reach areas of the country. These teams provided more than 400 000 consultations in 2022–2023, including in areas where less than 25% of health facilities were accessible to local populations. This life-saving initiative has been vital in providing humanitarian support from 2018 through 2023, when it was downsized due to reduced funding.

With its vast geographic coverage and complex political dynamics, Libya continues to experience sporadic, localized emergencies. Being a major migration route with about 700 000 migrants and refugees residing in the country, Libya requires accessible and free-of-charge health care services, often life-saving, for all vulnerable populations. This is complicated by significant shortages of human resources and supplies in underserved areas, and a lack of adequate policy and health governance, which affects both humanitarian support and health system strengthening reforms.

# Health security, emergency preparedness and response

In the Eastern Mediterranean Region, many countries, including Libya, face an increasing number of health emergencies from all hazards, such as infectious disease outbreaks, conflicts, and natural disasters. As part of its mission in Libya, WHO has supported the country in strengthening health security to minimize the danger and impact of acute public health events that threaten people's health across geographical regions and international boundaries. This support includes enhancing emergency preparedness and International Health Regulations (IHR 2005) capacities related to surveillance, laboratories, and points of entry, which are essential for strengthening IHR core capacities.

To ensure early preparedness and an effective response to any potential vaccine-derived poliovirus type 2, technical support was provided to finalize Libya's readiness to use nOPV2. Continuous support was also provided for the transportation of acute flaccid paralysis AFP samples to the designated polio laboratory in Tunisia. Several follow-up meetings between regional and country offices were held to ensure that polio surveillance is an integral part of the government's disease surveillance system; assess the country's preparedness capacities for outbreak detection and

response, including polio outbreaks; identify needs; and agree on actions for strengthening outbreak response.

For 2024–2025, WHO plans a comprehensive strategy to enhance health security and emergency preparedness, including completing a risk profile, reviewing the joint external evaluation, and updating the National Action Plan for Health Security.

In 2023, WHO successfully deployed 22 field coordinators to every district of the country, ensuring a systematic, locally appropriate, and contextualized field presence capable of overcoming security movement restrictions. The field coordinators play a pivotal role in alerting WHO about any incident related to conflict or public health concerns, coordinating communication between the community and central levels, supporting and monitoring WHO programmes, and stepping up beyond the call of duty in any emergency response and preparedness activities. Investing in these capacities has enhanced WHO's access, advocacy, and agility in preparing for and responding to the regular emergencies that arise across the country.

## WHO has supported IHR core capacities through:



Expanding EWARN from 180 to 326 sentinel sites and rapid response teams to 105, and transitioning to an all-inclusive IDSR system



Supporting public health laboratories across the country with training and equipment



Training health staff at Libyan airports, seaports and ground border crossings on the IHR and WHO's COVID-19 guidelines for points of entry



Establishing and enhancing the functionality of eight Emergency Operations Centres (EOCs) across the country through capacity-building and technical guidance





# Mental health and psychosocial support

Over the past decade, Libya has endured profound hardships due to prolonged conflict and catastrophic flooding events. These crises have significantly escalated the mental health and psychosocial support (MHPSS) needs among its population. WHO recognizes the urgency of addressing these needs and remains dedicated to enhancing mental well-being by integrating high-quality MHPSS services into 30 PHC facilities and 30 schools across 18 Libyan municipalities.

Responding to the devastating floods in eastern Libya, WHO, in collaboration with the National Committee for Mental Health, deployed multidisciplinary mental health teams to Derna, Al Marj, and Al Bayda. Each team, comprising a psychiatrist, a psychologist, and a nurse, serves eight health facilities. These dedicated teams have delivered over 1700 consultations, prioritizing women's and children's mental health. To ensure continuity of care, essential medications were also distributed to affected health facilities in Derna.

Moreover, WHO continues to support MHPSS services through general practitioners trained in Derna, Benghazi, Al Bayda, Sirte, and other municipalities. These professionals receive ongoing technical supervision from WHO-supported national

psychiatrists, ensuring the delivery of consistent and quality mental health services.

To maintain the high standards of these services, refresher training on the mhGAP intervention guide was conducted in November 2023, benefiting 15 previously trained general practitioners in Ajdabya, Derna, Al Bayda, and Sirte, in Benghazi. Additional training sessions on the mhGAP humanitarian intervention guide took place in December 2023 for 17 general practitioners in Derna.

In an innovative effort to promote responsible media reporting on mental health, a specialized training session was held for 16 journalists in eastern Libya. This programme aims to enhance the effectiveness of MHPSS programmes by empowering the media with the knowledge and skills to report sensitively and ethically on mental health issues.

Regular coordination meetings were conducted to facilitate a unified approach to addressing the mental health impacts of the Libyan floods in the east. These meetings, involving key partners, including health authorities, UN agencies and international organizations.

WHO has also invested in training health staff to deliver essential services to frontline workers. This initiative includes creating and disseminating educational materials designed to prepare health workers for managing the psychological impacts of disasters on communities, ensuring they are well-equipped to support recovery efforts effectively.



# Violence against women and children

Data on violence against women and violence against children remain scarce in Libya, as discussing or disclosing any incident of violence is challenging for survivors due to social stigma and community discrimination.

Violence leads to several health consequences, including physical injuries, women's health-related issues, the transmission of sexually transmitted infections such as HIV and syphilis, mental health issues, and it can potentially result in death by homicide or suicide.

WHO worked closely with teams specializing in emergencies, sexually transmitted infections, and mental health in Libya to integrate services and strengthen the health system's response to survivors of violence, particularly women, girls, and children.

In the first quarter, 69 general practitioners and 50 nurses and midwives working in hospital emergency departments were trained in the basics of providing essential health services to survivors. In the second quarter, 71 personnel (13 male and 58 female), including general practitioners, nurses, midwives, and laboratory technicians—

working in branches of the NCDC, infectious disease departments in tertiary hospitals, sexual reproductive and child health care providers, and forensic doctors—were trained on how to approach survivors and link their infectious status to any type of violence, especially sexual.

In the third quarter of 2023, WHO supported the Protection and Health Promotion Directorate in the National Centre for Disease Control, working together to raise community awareness about the effects of violence on mental and physical health.

Due to the reasons mentioned above, celebrating the 16 days of activism campaign (25 November–10 December), themed “Invest to prevent violence against women and girls,” was challenging. We adopted a community approach to celebrate it, which involved raising awareness about the health consequences of violence on children and adults in public schools. Our target audience was the school workforce, with a focus on health and psychosocial service providers, who were more than 90% female. During the campaign, awareness-raising sessions were conducted, and posters containing useful messages were distributed to be displayed in schools.



# Noncommunicable diseases

In December 2023, the NCDC, the Ministry of Health and WHO convened in Tripoli to unveil the findings of the WHO STEPwise approach to NCD risk factor surveillance (STEPS) survey during a national symposium. The STEPS survey is a WHO-standardized method designed to comprehensively assess the risk factors contributing to the significant burden of NCDs within countries. These risk factors include tobacco use, unhealthy dietary habits, physical inactivity and air pollution.

Throughout 2023, data were meticulously collected from 6000 households, representing a diverse cross-section of Libyan society. Respondents, spanning an age range of 18 to 69 years, were approached to participate in the survey. Notably, the gender distribution was nearly equal, with women constituting 54.4% and men 45.6% of the surveyed population.

The survey's outcomes paint a concerning picture of Libya's health landscape, indicating a distressingly high prevalence of NCDs and their associated risk factors. Alarming, more than 40% of respondents, predominantly among those

aged 18–29 years, self-identified as smokers, underscoring the pervasive issue of tobacco use.

Additionally, a quarter of the surveyed individuals reported suffering from hypertension, highlighting the widespread prevalence of this cardiovascular condition. Moreover, the survey exposed troubling dietary trends, with many participants reporting excessive salt intake, inadequate consumption of fruits and vegetables, and high levels of physical inactivity.

The results of the STEPS survey will play a pivotal role in guiding the NCDC in the formulation of a comprehensive national strategy to address NCDs and the development of a multifaceted action plan aimed at combating NCDs across Libya. Furthermore, the survey results will serve as the basis for the formulation of national guidelines pertaining to NCD prevention, diagnosis, and management. These guidelines will provide health care practitioners with evidence-based recommendations for the prevention, early detection, and optimal management of NCDs, thereby ensuring standardized and quality care delivery across health care facilities in Libya.



# Third-party monitoring

Over the past few years, constraints on access imposed by the UN's Department of Safety and Security have limited WHO's ability to directly monitor its operations across Libya. Consequently, WHO has engaged an external agency as a third-party monitor. This agency was selected for its extensive experience in evaluating humanitarian programmes in Libya, other developing countries, conflict zones, and fragile states.

In 2023, the third-party monitor conducted several evaluation rounds of WHO's operations in Libya. It assessed the WHO training workshops and supporting documents, conducted key informant interviews, and visited health facilities to verify the distribution of medical supplies and equipment. It also evaluated the level of satisfaction among the Ministry of Health authorities with the quality of WHO support, which was systematically rated as satisfactory or very satisfactory. The evaluations consolidated data from beneficiaries, stakeholders, and partners, including the Ministry of Health.

The third-party monitor rated the WHO's training courses as good or very good; all participants interviewed reported improved capacity following the training. This finding is supported by data collected through pre- and post-training questionnaires. The third-party monitor confirmed that items procured by WHO were distributed to health facilities according to the plans agreed upon with the Ministry of Health. It also noted that staff at both the central and local levels of the Ministry of Health would appreciate additional support to cover more geographic areas and requested more donations. As WHO has explained, with the shift from a humanitarian to a development response, donor funding for Libya is decreasing, making it challenging for WHO to meet all emerging needs. WHO is advocating for the Government to make domestic resources available. Overall, the third-party monitor concluded that WHO operations were relevant and impactful.



The third-party monitor confirms that items procured by WHO were distributed to health facilities according to the plans agreed upon with the Ministry of Health

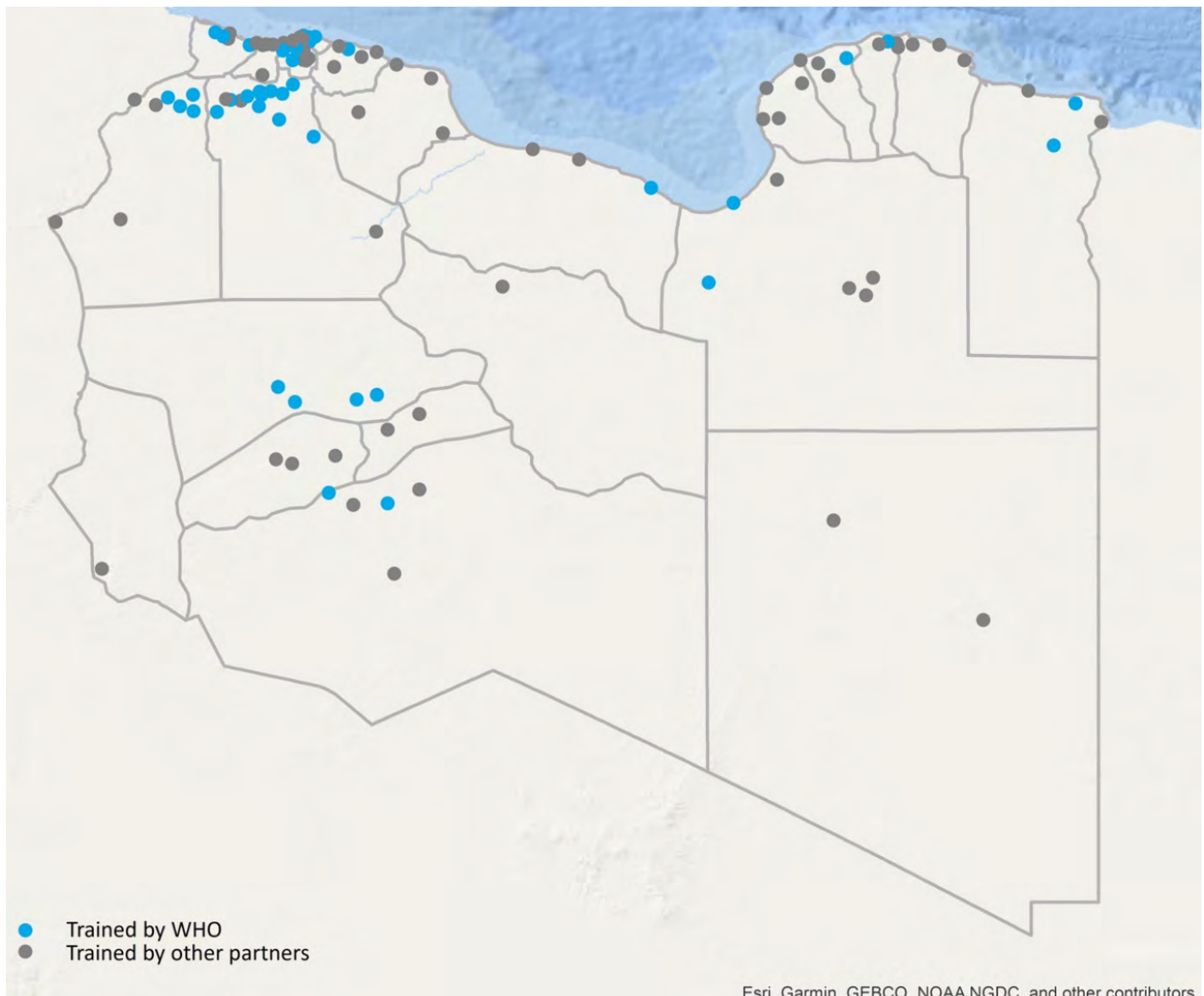
# Health information system

The main objective of Libya's 2023 health information system (HIS) workplan was to enhance the HIS by improving data quality, analytics, and the use of information for decision-making across all health intervention levels.

For years, Libya's HIS has been severely disrupted by prolonged political instability and fragmented governance. The five-year plan to strengthen Libya's HIS concluded in 2022, with partial achievement of its objectives and many areas to be addressed in 2023, including the expansion of the District Health Information Software 2 (DHIS2) across the country (Fig. 6), integration of vertical programmes' reporting into DHIS2, use of electronic tools for standardized

registration of vital statistics, strengthening institutional analytical capacities and utilization of information to develop evidence-based policies and action plans. Launching the HeRAMS approach nationwide was also one of the priority areas of the 2023 HIS workplan.

WHO's Health Information Management Unit continued to strengthen Libya's HIS by providing technical support to WHO programmes, Ministry of Health counterparts, and health partners in Libya, and creating an enabling environment towards a unified HIS with systematic reporting of data and production and use of information for evidence-based decisions.



**Fig. 6. Coverage of DHIS2 implementation per municipality**



WHO, in collaboration with the Ministry of Health, advanced the rollout of the DHIS2 platform in 40 municipalities

In 2023, WHO, in collaboration with the Ministry of Health, advanced the rollout of the DHIS2 platform in 40 municipalities, including 465 PHC facilities and 51 hospitals, where 655 health staff from public PHC facilities, hospitals, and health administration at the municipality level were trained on using DHIS2 and equipped with necessary ICTs (i.e., laptops, desktops and tablets) to enable data entry, analysis and dissemination of information. WHO support, together with other health partners, including UNICEF, International Organization for Migration, Deutsche Gesellschaft für Internationale

Zusammenarbeit, International Rescue Committee, International Medical Center and United Nations Population Fund, enabled the achievement of a 100% implementation rate of DHIS2 nationwide.

To further strengthen HIS capacity, 34 supervisory site visits were conducted to monitor and evaluate the operational status of DHIS2, guiding staff at the health facility level, providing on-the-job training and fostering collaboration between national stakeholders to effectively use the DHIS2 platform. As a result, knowledge of DHIS2 improved, and challenges were identified and raised for corrective



WHO support, together with other health partners, enabled the achievement of

**100%**

implementation rate of DHIS2 nationwide



**34**

supervisory site visits were conducted to monitor and evaluate the operational status of DHIS2



**516**

hospitals/primary health care facilities have rolled out the DHIS2 platform



**655**

health staff were trained on using DHIS2 and equipped with necessary ICTs

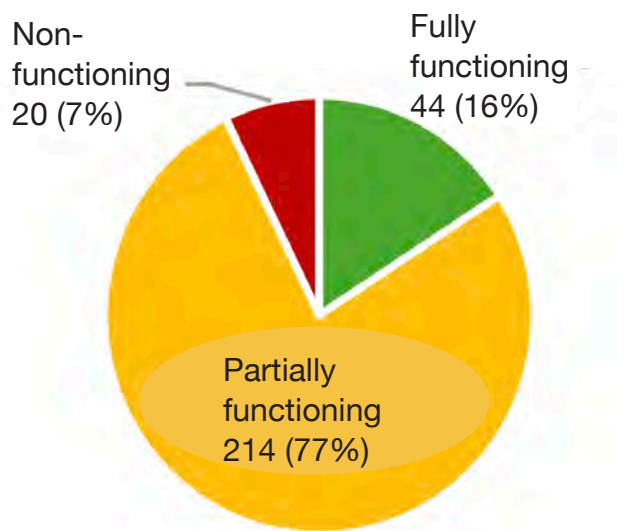
measures to be put in place. Approximately 7 million people now reside in areas that utilize DHIS2.

In collaboration with the Ministry of Health and other national counterparts, WHO spearheaded the development of a national list of SDG health-related indicators as the first step for setting up systematic monitoring mechanisms to measure Libya's progress towards reaching the Sustainable Development Goal 3 (SDG3) targets. Consensus among all consulted counterparts on the SDG3 national list and approaches to reporting was also achieved.

WHO supported strengthening civil registration and vital statistics (CRVS) systems through developing national SOPs for guiding the process of death certification and cause of death completion. This paved the way for integrating Libya's civil registration and vital statistics reporting into DHIS2, which is planned for 2024.

In addition, WHO continued to support national efforts to strengthen links between humanitarian and development information streams. By the end of 2022, the Ministry of Health officially adopted WHO's HeRAMS to assess the status of functionality and service availability at the health facility level (Fig. 7). Subsequently, in 2023, steps were taken to adapt HeRAMS to the local context and launch it at the hospital level across Libya, with plans to extend coverage to PHC facilities in 2024. WHO also supported the capacity-building of Ministry of Health staff involved in hospital data collection using the HeRAMS global platform. Furthermore, a separate digital dashboard was developed to visualize information on assessed facilities.

Furthermore, WHO continued to monitor attacks on health care and report confirmed incidents to its Surveillance System for Attacks on Health Care. Only a single assault incident targeting health care staff was reported, resulting in damage to equipment but no injuries.



**Fig. 7 Functional status of assessed health facilities, east of Libya**



### Digitalization of the national HIS

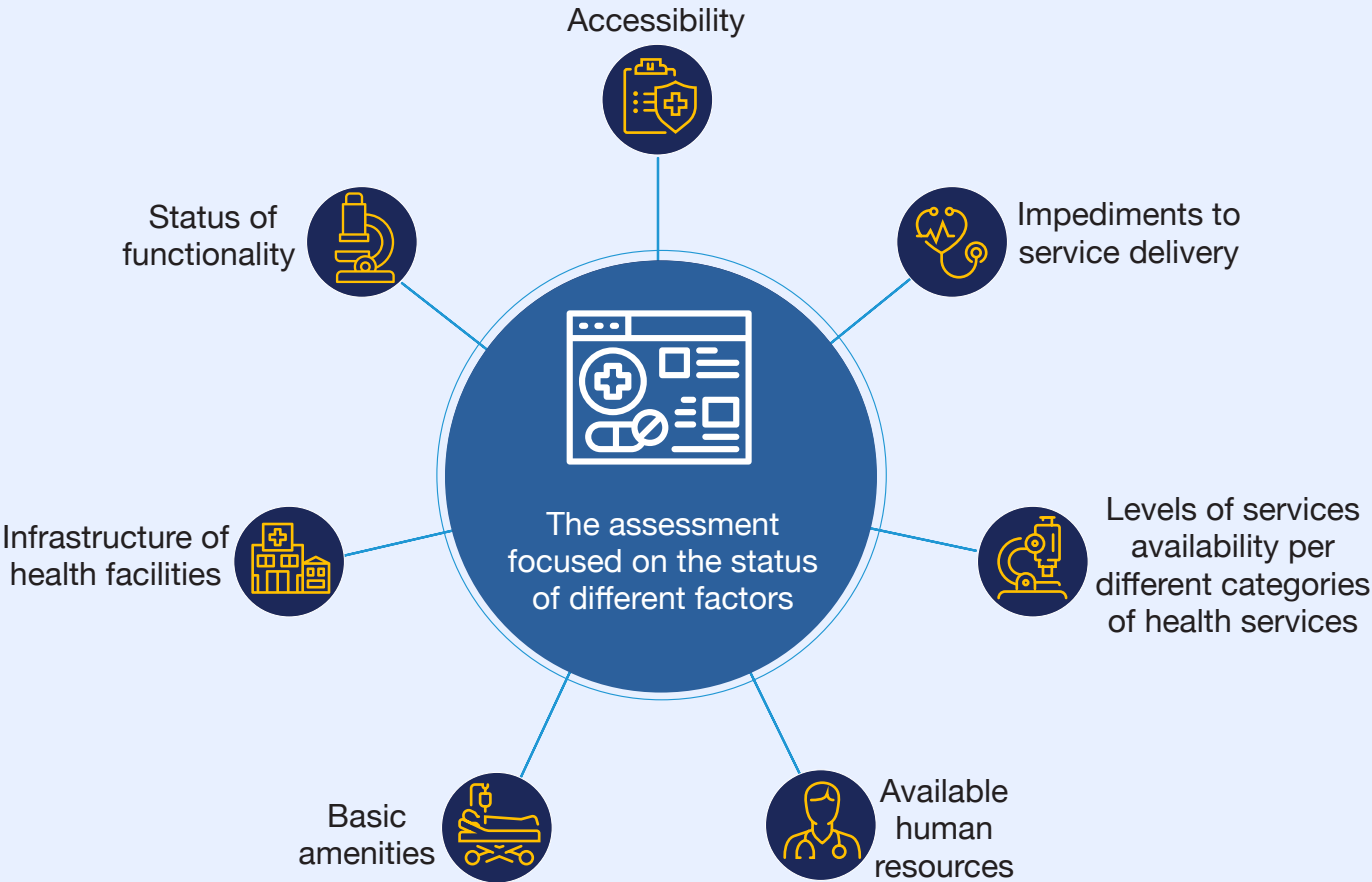
In 2023, WHO supported building a long-lasting institutional capacity of Ministry of Health data management staff of the national Health Information Centre, National Centre for Disease Control, and Primary Healthcare Institute, where staff has been trained on basic and advanced computer skills using MS 365, Advanced Excel and MS Power BI.



**WHO's key performance indicators and operational response** continued in 2023, where health situation, key interventions and delivered assistance by WHO is systematically visualized on an interactive platform, on a monthly basis.

Following the devastating flood crisis of 10 September 2023 in eastern Libya, WHO conducted rapid and in-depth assessments for all public health facilities (331) in five affected districts: Derna, Al Jabal Al Akhdar, Almarj, Benghazi and Tobruk, where approximately 1.7 million people reside.

Innovative use of technology-facilitated efficient data collection, verification, analysis, and production of visualized information on interactive dashboards, enabling the identification of gaps in service delivery and guiding evidence-based emergency response measures.





# Provision of medicines and medical equipment

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As part of the emergency response, WHO immediately procured essential medicines and medical supplies for the flood-affected hospitals and health facilities to ensure the restoration and continuity of their functionality.

The Organization arranged for two charter flights carrying 717 kits—comprising 250 Interagency Emergency Health Kits, 200 Trauma and Emergency Surgery Kits, 105 PED-Kits, 190 kits for noncommunicable diseases, which arrived at Benina Airport in Benghazi. These were distributed in coordination with the Ministry of Health to the affected health facilities. Subsequently, a second order was placed for 713 kits and medical equipment, 20 ambulances and 10 mobile clinics; most of these items arrived and were distributed to the end users.



# Infection prevention and control

In 2023, WHO deployed 11 IPC officers to provide technical support to 24 hospitals and medical centres. A total of 2240 health workers received on-the-job training on IPC measures through the IPC network. This training ensured the availability of dedicated and trained IPC focal points to address critical gaps, maintain preparedness for emerging pathogens, and uphold the core components of IPC.

WHO, in coordination with the NCDC, drafted the country's first national IPC guidelines, which were endorsed by the Ministry of Health in February 2023.

A leadership training workshop was conducted, targeting 45 directors of health facilities and the

heads of the IPC committees. This workshop supported the implementation of the IPC guidelines and measures at the health facility level.

Training cascades for the IPC committees at health facilities on the IPC guidelines and policies were conducted, targeting 182 members of the IPC committees at the medical centres, hospitals, polyclinics, and PHC centres.

WHO supported the Ministry of Health in establishing the national IPC programme and the national AMR committee and provided the necessary technical support.

Furthermore, WHO conducted a training workshop for 27 laboratory technicians across Libya on the phenotypic detection of multidrug bacteria.



11

IPC officers deployed by WHO to provide technical support to 24 hospitals and medical centres



2240

health workers received on-the-job training on IPC measures through the IPC network



# Response to the floods in Derna

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On 10 September 2023, Storm Daniel struck northeastern Libya, causing the worst flooding the country has seen in the last century. The districts of Derna, Al-Jabal Al-Akhdar and Al-Marj were among the hardest hit. Homes and public facilities were destroyed, roads were heavily damaged and widespread electricity outages occurred. In Derna — the city that suffered the most — authorities opened a dam to relieve water pressure. Still, the flood's intensity caused its collapse, followed by the failure of a second dam along the River Derna. The floods were so powerful that they destroyed most of the city's infrastructure, leaving the area without basic services, electricity, internet connectivity, or most service buildings. It was reported that buildings as tall as seven stories were uprooted and swept into the Mediterranean Sea.



**5702**

deaths reported



**452**

people rescued



**~3000**

people missing

Official figures report a total of 5702 casualties and more than 3000 missing persons. Notably, among the casualties were 104 health care workers.

Prior to Storm Daniel, Libya's health system was already challenged by inadequate infrastructure, scarce medical resources, and a shortage of skilled health care professionals. The country faces accessibility issues that hinder health care delivery, especially in remote areas. Mental health services are particularly deficient, which exacerbates the population's vulnerability. The pressing need for medications and care for chronic/noncommunicable diseases, along with recurrent vaccine stock-outs, highlight the risk of vaccine-

preventable diseases and underline the necessity for concerted efforts to scale up the immunization programme. These challenges are further compounded by a lack of coordination among health entities, negatively affecting the system's overall effectiveness.

The storm acted as a catalyst, intensifying these challenges, and highlighting the health system's unpreparedness for emergencies. This situation underscores the critical need for investment in preparedness and readiness in the short to medium term, along with comprehensive reforms. Ensuring targeted interventions to address immediate and emergency needs is also vital.



**104**

health workers'  
lives lost



**44 800**

displaced  
people



**331**

health facilities  
were assessed

# Devastating impact and public health risks

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) estimated that approximately 884 000 people lived in the areas directly affected by the storm, and they have been impacted to varying degrees. The severity of the humanitarian situation was exacerbated by several factors, including access constraints, pre-existing humanitarian conditions, and the socioeconomic situation's deterioration. Before the storm, around 300 000 people in Libya were assessed as requiring humanitarian assistance, according to the 2023 Humanitarian Overview.

Several facilities, including health facilities, were flooded, exposing them to the risk of water contamination and health hazards associated with the lack of access to proper water and sanitation services. The need for mental health

and psychosocial support services increased dramatically among the affected population due to the devastating emotional and psychological trauma. Of particular concern are the most vulnerable groups, such as children and youth, women and girls, health care workers, migrants, refugees, and people with disabilities.

WHO conducted an in-depth assessment of the functionality status of a total of 331 health facilities, which included 280 operational facilities and 51 permanently closed facilities due to administrative reasons, in five districts affected by the floods. The results of this assessment revealed that only 44 (13%) were fully functioning, 214 (65%) were partially functioning, and 73 (22%) were non-functioning.

The severity of the humanitarian situation was exacerbated by several factors, including access constraints, pre-existing humanitarian conditions, and deterioration of the socioeconomic situation



884 000

people lived in the areas directly affected by the storm



300 000

people in Libya were assessed as requiring humanitarian assistance



331

health facilities were assessed for status of functionality



World Health  
Organization

# WHO response to Libya's floods

In response to the devastating floods that struck Libya in September 2023, WHO has launched a significant campaign to provide essential medical supplies and equipment to the impacted municipalities in the Eastern Mediterranean Region. Recognizing the urgent need to address the health consequences of this natural disaster, WHO has mobilized its resources and expertise to alleviate the impact on vulnerable populations.

The distribution initiative includes a wide array of medical equipment and supplies, amounting to 245 items with a total volume of 645 cubic metres. These resources are designed to satisfy the diverse health care requirements that have emerged in the wake of the floods, covering everything from trauma care to infection prevention and control. Notably, WHO has allocated specialized kits for noncommunicable diseases, trauma and emergency surgical care kits, infection prevention and control (IPC), and Integrated Emergency Health (IEHK) kits, which collectively total 648 kits.

WHO dispatched one ambulance and 10 mobile clinics to support emergency responses and medical outreach in the areas most severely affected by the floods. These mobile units are vital for communities isolated from traditional health care facilities, ensuring the continuity of essential medical services for everyone.

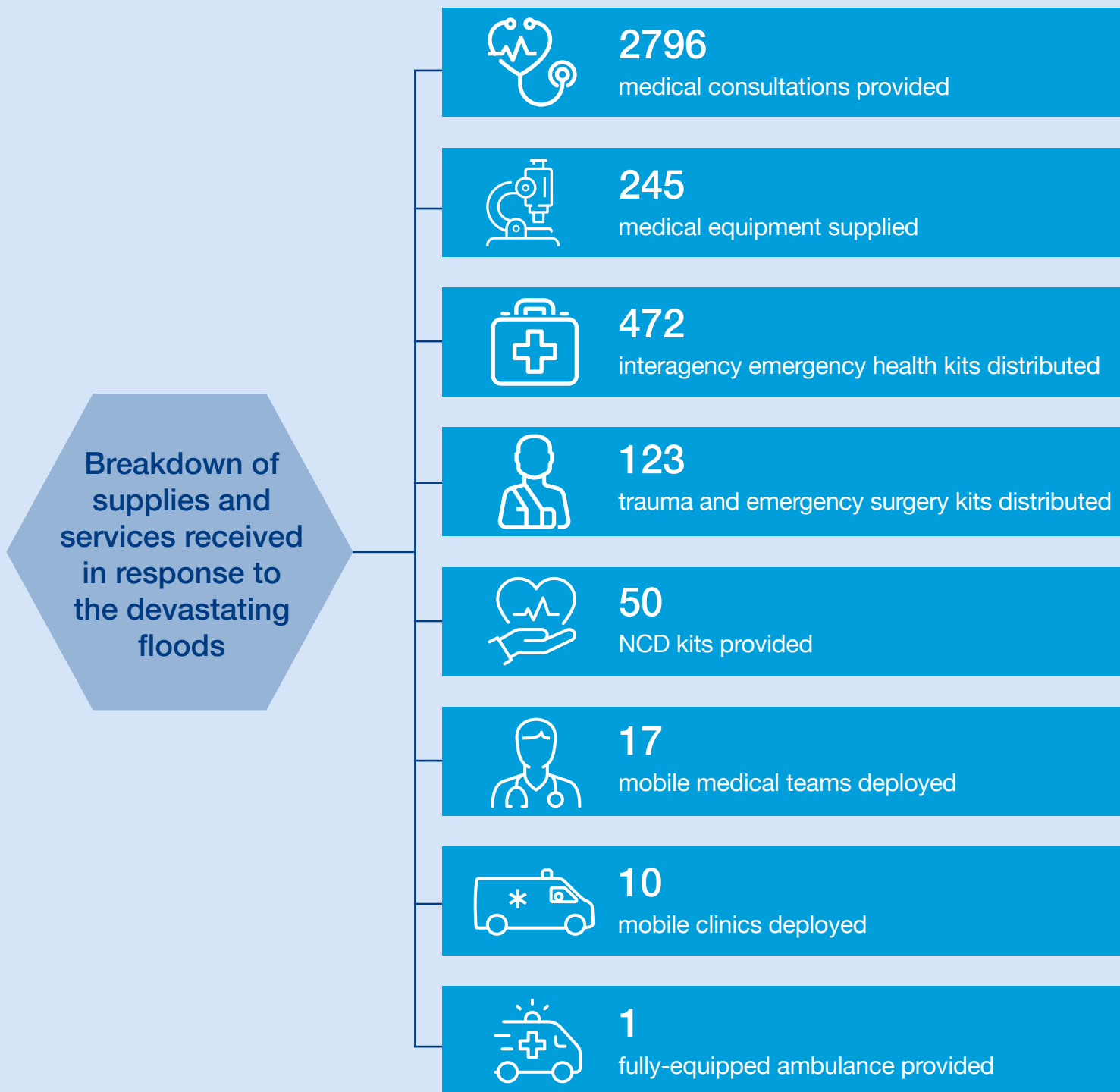
Recognizing the critical role of local capacity in effectively responding to health emergencies, WHO has emphasized training initiatives in the Region. In total, 207 individuals have received specialized training to equip them with the skills needed to provide high-quality health care services and adeptly handle emerging medical situations.

The WHO's intervention goes beyond just supplying medical equipment to also include comprehensive health care services. To date, they have conducted 2796 consultations, addressing a range of medical needs, including specific mental health concerns. This comprehensive approach highlights the WHO's commitment to tackling the complex health issues resulting from the floods.

The affected municipalities—Derna, Al Jabal Al Akhdar, Al Marj, Benghazi, Tobruk, Al Kufra, and Sirt—were selected based on the extent of the flooding and the subsequent health care demands.



The WHO's distribution of medical supplies and equipment in response to the floods in Libya is an essential measure in addressing the resulting health challenges. Through strategic coordination, capacity-building efforts, and all-encompassing health care services, WHO expresses its solidarity with the Libyan people, tirelessly aiding in their recovery and the reconstruction of their communities.





# Emergency health response

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WHO played a crucial role in the emergency health response to the devastating floods that affected eastern Libya in September 2023. Following the tropical storm and subsequent flooding, WHO promptly activated its incident management system and conducted comprehensive assessments to understand the damage and health needs of the affected population.

One of the cities most impacted was Derna, where a significant portion was submerged due to the collapse of two dams. WHO quickly mobilized its resources and developed a response plan to assist the affected communities. Regular health sector meetings were convened to ensure coordination and the effectiveness of response efforts.

To enhance access to health care services, WHO procured and delivered 10 mobile clinics to various cities, including Benghazi, Derna, Al Bayda, Al Marj, Taknis, Shahat, Sousa and Tobruk. These clinics were crucial in providing emergency, family medicine, reproductive and child health and mental health services to the affected population. Moreover, five multidisciplinary mental health and psychosocial support teams, comprising psychiatrists, psychologists, and nurses, were deployed, providing about 1700 consultations to address the mental health needs of the affected individuals.

Additionally, WHO focused on strengthening laboratory capacity and surveillance systems to detect and prevent waterborne and vector-borne diseases. Close technical support was provided in collaboration with the Ministry of Health regarding dead body management and flood-related disease prevention measures. Working with the NCDC,



In response to the devastating floods, WHO deployed 21 international and national staff members to support emergency operations in Benghazi. A comprehensive assessment of 331 health facilities in the affected areas was conducted. Emergency kits, including essential health supplies and noncommunicable disease kits, were airlifted from the Dubai WHO hub and distributed to 52 facilities, ensuring the availability of life-saving medical resources.

WHO traced TB patients in the flood-affected areas; 22 out of 23 TB patients were reached, with one uncontactable. Those traced received counseling and medicine to ensure continuity of their treatment.

Furthermore, WHO's long-standing initiative of deploying 11 Libyan medical teams to underserved areas proved vital during the flood response. Operational since 2018, these teams provided outreach health services to host communities, migrants and displaced populations.

WHO led nine meetings for health response coordination, with 30 partners and donors participating in the first three coordination meetings, which began in the first two weeks of the response. Twelve international emergency medical teams (EMTs) are currently operating in Derna. An initial coordination meeting was held on 1 October, where the EMTs shared updates on their capabilities and

response operations. The meeting concluded with an agreement to establish an emergency medical teams coordination centre, ensuring streamlined communication, coordination, and task allocation among EMTs, fostering a more efficient and cohesive response.

Overall, WHO's emergency health response in flood-affected Libya encompassed a broad range of interventions, including the distribution of medical supplies and kits, deployment of mobile clinics and mental health teams, strengthening of laboratory and surveillance systems and providing vital health care services to underserved areas. These efforts demonstrated WHO's commitment to supporting the health system and ensuring the provision of life-saving services in times of crisis.



# Restoring functionality and relief measures

A comparative analysis of the rapid health assessment and the subsequent in-depth health assessment reports demonstrates notable improvements in the functionality and accessibility of health facilities in the flood-affected areas of eastern Libya. The initial rapid assessment identified that only 13% of the assessed facilities were fully functioning, with 73% partially functioning, and 14% not functioning.

However, following comprehensive efforts and targeted interventions, the in-depth assessment revealed a significant rise in functionality: 16% of health facilities were reported as fully functioning, 77% as partially functioning, and only 7% as not functioning. This positive trend indicates a substantial increase in the operational capacity of the health facilities, reflecting the effectiveness of the restoration measures undertaken.

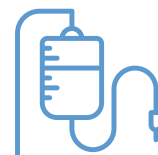
Additionally, measures were taken to address the shortage of medical staff and resources. As part of the relief measures, 11 medical staff members, including general practitioners, gynaecologists, pediatricians and dermatologists, were deployed to the affected areas. Furthermore, medical kits and supplies were provided to 52 health facilities; this included 272 kits, 1421 consumables, 589 pieces of medical equipment and 2000 body bags.

These distributions played a crucial role in ensuring the availability of essential resources, enhancing the capacity to deliver health care services, and effectively managing the aftermath of the floods. These combined efforts signify significant progress in restoring functionality and enhancing the accessibility of health care services in the flood-affected areas of eastern Libya.



**52**

health facilities were provided with medical kits and supplies, including:



**1693**

essential health kits and consumables



**589**

pieces of medical equipment



**2000**

body bags

# Risk communications and community engagement

WHO has led initiatives to support communities affected by Storm Daniel, working in close collaboration with the Ministry of Health and the NCDC. WHO adopted a robust strategy focused on enhancing risk communication and community engagement (RCCE). This strategy targeted key issues, including waterborne and foodborne diseases, infectious diseases and mental health and psychosocial support.

WHO launched a campaign to circulate health guidelines to protect individuals in flood-impacted areas. The campaign prioritized awareness about waterborne and foodborne diseases and mental health support for displaced individuals. The first phase of the campaign was a notable success, with data from Meta indicating it reached over 5.7 million people and generated more than 10 million views on Facebook and Instagram.

In partnership with the Ministry of Health and NCDC, WHO produced a mental health community guide in both English and Arabic to

bolster the psychological health of flood victims. A supplementary booklet, available in Arabic, was also distributed, focusing on mental health and psychosocial support services post-disaster, including a section on frequently asked questions. This focus includes support for adolescents and children, raising awareness about mental health concerns such as depression, anxiety, post-traumatic stress disorder and suicide.

WHO conducted training sessions, workshops, and knowledge exchange initiatives to equip individuals with the skills to communicate public health information effectively. This capacity-building strategy emphasized public health prevention, mental health first aid, and combating misinformation, aiming to enhance resilience and create a sustainable impact.

In collaboration with UNICEF, WHO introduced the 'Safe water healthy lives' manual, distributing over 50 000 copies to the affected individuals to ensure water safety post-flooding.



# Environmental health

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The flooding in Derna not only caused widespread damage to infrastructure and livelihoods but also brought about significant environmental challenges and increased the risk of disease spreading. The primary environmental issue after the floods concerned water contamination, and the challenge was to prevent the risk of infectious diseases due to water stagnation.

With damage to a complete lack of water, sanitation, and hygiene infrastructure, this risk was high. The environmental situation remains challenging with the proliferation of disease vectors, such as flies and mosquitoes. Stagnant water, particularly in Al-Makhili, Derna and Soussa, is a breeding ground for mosquitoes and creates conditions conducive to the spread of malaria and waterborne diseases.

The local health authorities, alongside WHO, advised against drinking untreated water. Contamination from sewage treatment plants was highlighted as a contributing factor as sewage mixed with floodwater. There was also ethical and environmental management of the deceased, which was an important aspect of crisis management.

WHO supplied information regarding this to prevent any further contamination and spread of disease. The primary water sources in Derna were the water desalination plant and a number of local wells. After the storm, the water desalination plant and nine of the eighteen wells were damaged by the floods, and consequently require rehabilitation. In Derna, nine of the eighteen boreholes in the city are out of service.

WHO recommends the implementation of regular monitoring of water quality to identify contamination hotspots and ensure access to safe drinking-water for the population. WHO collaborated closely with Environmental Sanitary Departments and the General Company for Water and Wastewater to bolster the water quality monitoring system. This entailed setting up three water quality monitoring laboratories in the affected regions.

Additionally, training sessions will be conducted for laboratory technicians to enhance their proficiency in water quality testing techniques. Furthermore, WHO will offer training programmes for sanitary inspectors on water sampling and sanitary surveillance pertaining to water resources, storage tanks, and the water distribution network.



# Fatima's journey to healing in the aftermath of Derna's floods

Following the devastating floods in Derna, 25-year-old survivor Fatima was found in the consultation room of the WHO-supported Al-Wehda Hospital in Derna. Sitting quietly, her face was devoid of expression. Dr Sumaya Shaftar, a mental health professional, began diagnosing Fatima's condition after her harrowing experience. During the floods, Fatima, along with her mother, father, and sister, was swept over three kilometres away, ending up at a stranger's residence. The rest of her family members vanished.

"Fatima was completely emotionless as she recounted the haunting loss of her family members with unwavering composure, concealing the deep trauma she had endured," Dr. Sumaya observed. "As she began to open up, her eyes filled with

tears, and her voice quivered with suppressed emotion," she added.

"The sound of women and children screaming never leaves my mind, and I hear it every night," Fatima revealed. "I no longer have the will to sit with my family, and sometimes I contemplate ending my life," she added.

The nearest health facility offering mental health services was 200 kilometres from Fatima's location. Therefore, Dr Sumaya developed a comprehensive treatment plan, including medication and therapy sessions, to address Fatima's deep psychological trauma. After a significant period, the symptoms began to subside, and Fatima regained the ability to participate in normal activities.



# Resource mobilization and international support

In 2023, WHO Libya successfully mobilized over US\$ 15 million. Approximately US\$ 8 million supported the WHO's standard activities (Fig. 8), while US\$ 7 million aided the emergency response to Storm Daniel (Fig. 9).

The European Delegation in Libya confirmed its status as the primary supporter of the WHO's standard activities in the country, contributing over 70% of the funds mobilized in 2023. This was followed by contributions from the German Federal Office and the Agenzia Italiana per la Cooperazione e lo Sviluppo (AICS).

The funding landscape in Libya underwent a significant shift in 2023. In 2022, ECHO withdrew from Libya due to the relative stabilization of the context, prompting a revision of the cooperation framework between the UN and the Libyan Government. This transitioned to the new UN Sustainable Development and Cooperation Framework (UNSDCF).

This shift had a dual effect. It encouraged other emergency donors to disengage from Libya and prompted the remaining donors to adjust their funding priorities. As a result, the funding landscape in Libya changed dramatically, creating severe gaps in critical and life-saving activities.

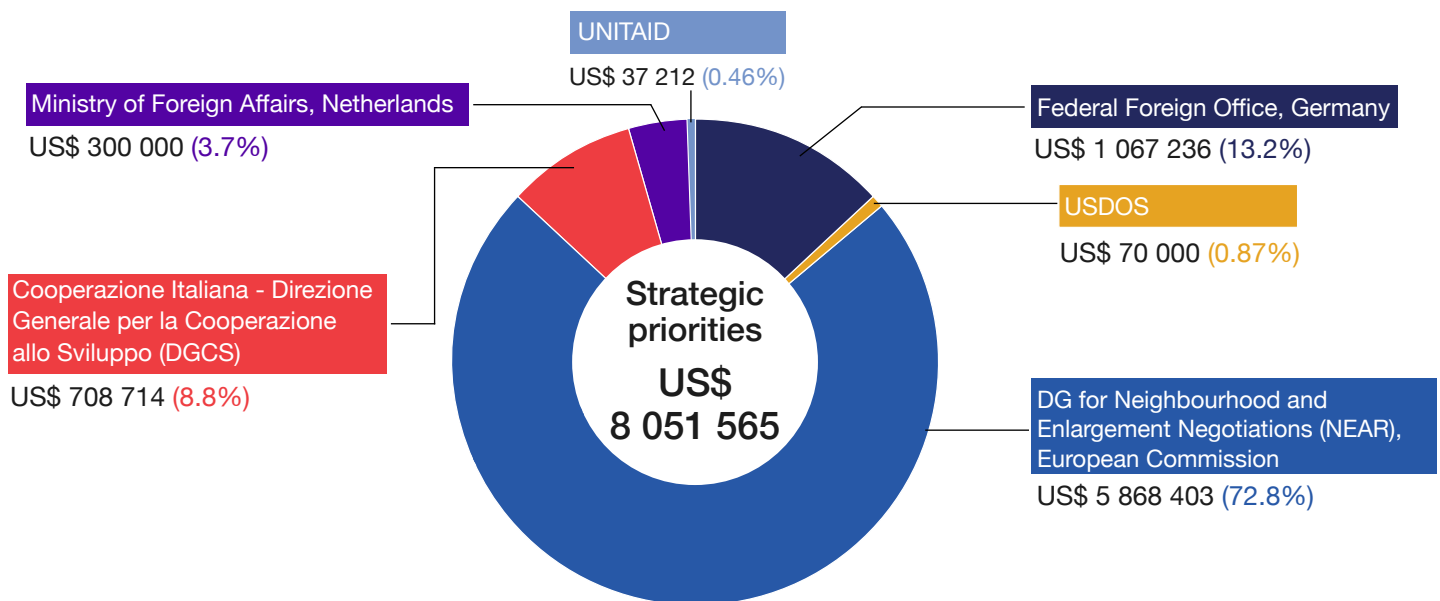


Fig. 8. Donor funding to support the work of the WHO Country Office in Libya, 2023

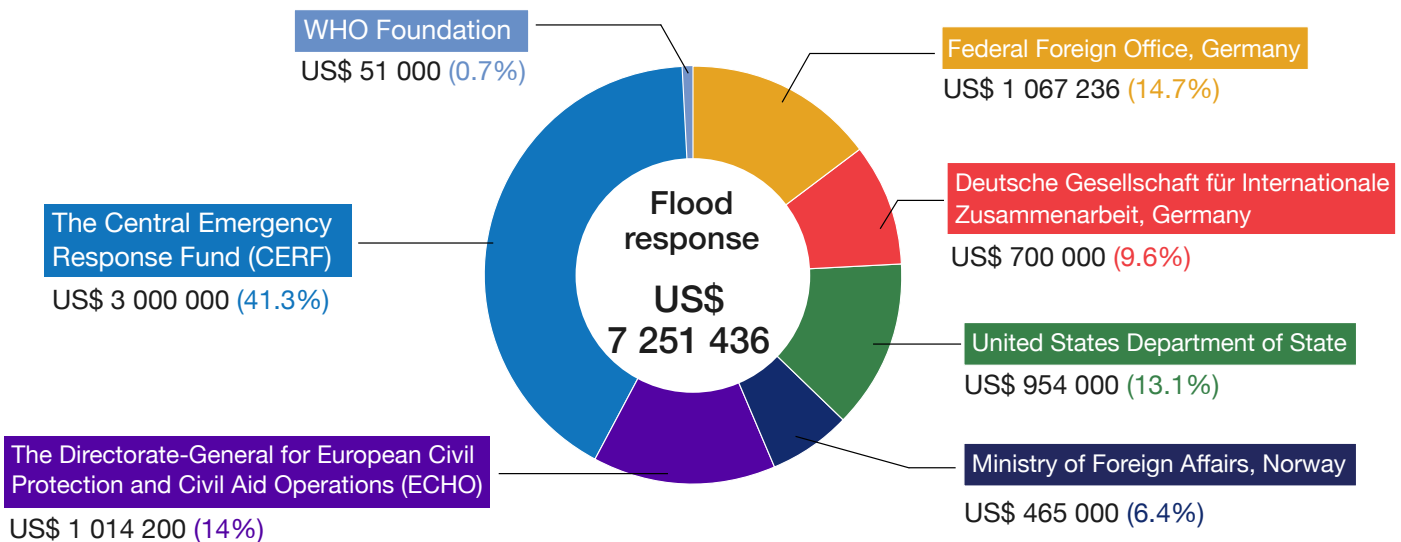


Fig. 9. Donor funding to support the flood response in Libya, 2023

## Emergency response – Storm Daniel

A few days after the onset of the emergency, WHO submitted a request to the Contingency Fund for Emergency for US\$ 2.3 million. The immediate availability of these funds allowed a prompt initiation of the emergency response. On 14 September 2023, the United Nations Office for the Coordination of Humanitarian Affairs, and humanitarian partners, including WHO, launched the Libya Flood Response Flash Appeal with a financial requirement of US\$ 71.4 million to reach 250 000 people with immediate priority interventions over the first three months after the emergency onset. Health was considered a priority, with health partners appealing for approximately US\$18.3 million, of which WHO requested US\$ 11.1 million.

In the aftermath of the storm, WHO provided all donors with regular and detailed updates on the humanitarian situation in the eastern region. The donors' response was immediate and generous, with several proposing to provide additional funds immediately to support the emergency response within previously funded awards.

The German Government provided a top-up of EUR 1 million to the previously funded project on “Supporting all-hazard emergency health management in Libya at strategic and operational levels.” GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) contributed an additional EUR 700 000 to the project “Strengthening the health system and pandemic response in Libya.” The EU Civil Protection and Humanitarian Aid added EUR 1 million to the project on “Strengthening and expanding the Early Warning Alert and Response Network (EWARN) across Libya.” The US Bureau of Humanitarian Assistance provided US\$ 954 000 for a project to “Mitigate excess mortality and morbidity among flood-affected people in Eastern Libya by restoring and expanding access to health care services.”

As the emergency winds down, chronic gaps and severe stock-outs in the availability of essential services and medicines continue to affect Libya. Without strategic, predictable, and sustained support from international and domestic funds, Libya will struggle to implement the critical reforms needed to achieve the SDGs by 2030.



**WHO is currently seeking donor support to address gaps in several areas, including:**



Mental health



Noncommunicable diseases



Communicable diseases



Immunization



Antimicrobial resistance



Emergency preparedness



Health resources



Service availability monitoring systems



# Leadership and coordination

In 2023, WHO continued to collaborate with and strengthen coordination with the Ministry of Health to support and enhance Libya's health system. This support included providing strategic guidance, as well as technical and operational support. WHO aligned its support with the Thirteenth General Programme of Work, contributing to the triple billion goals: 1 billion more people benefiting from universal health coverage; 1 billion more people better protected from health emergencies; 1 billion more people enjoying better health and well-being.

Throughout 2023, the United Nations in Libya transitioned from a humanitarian mode to an approach known as the humanitarian-development-peacebuilding nexus. The UN Sustainable Development Cooperation Framework 2023–2025, prepared in partnership with the Government and stakeholders across the country, will guide the UN's collective work in Libya over the next three years. This framework integrates a human rights-

based approach across its interventions to ensure that those most vulnerable and at risk of being left behind are central to Libya's peacebuilding and development agenda. Under this framework, WHO leads the health sub-group, coordinating the planning and monitoring of health interventions in liaison with the Ministry of Health. The main programmes supported include emergency preparedness, the development of an essential package of health services, disease surveillance, and PHC services, focusing on immunization, child health, reproductive health, and mental health.

During the flood response in the east, WHO led the health coordination efforts. Following the floods, thematic working groups were activated. WHO co-led the health thematic working group with the Ministry of Health, convening health partners to coordinate activities and ensure the complementarity of actions.

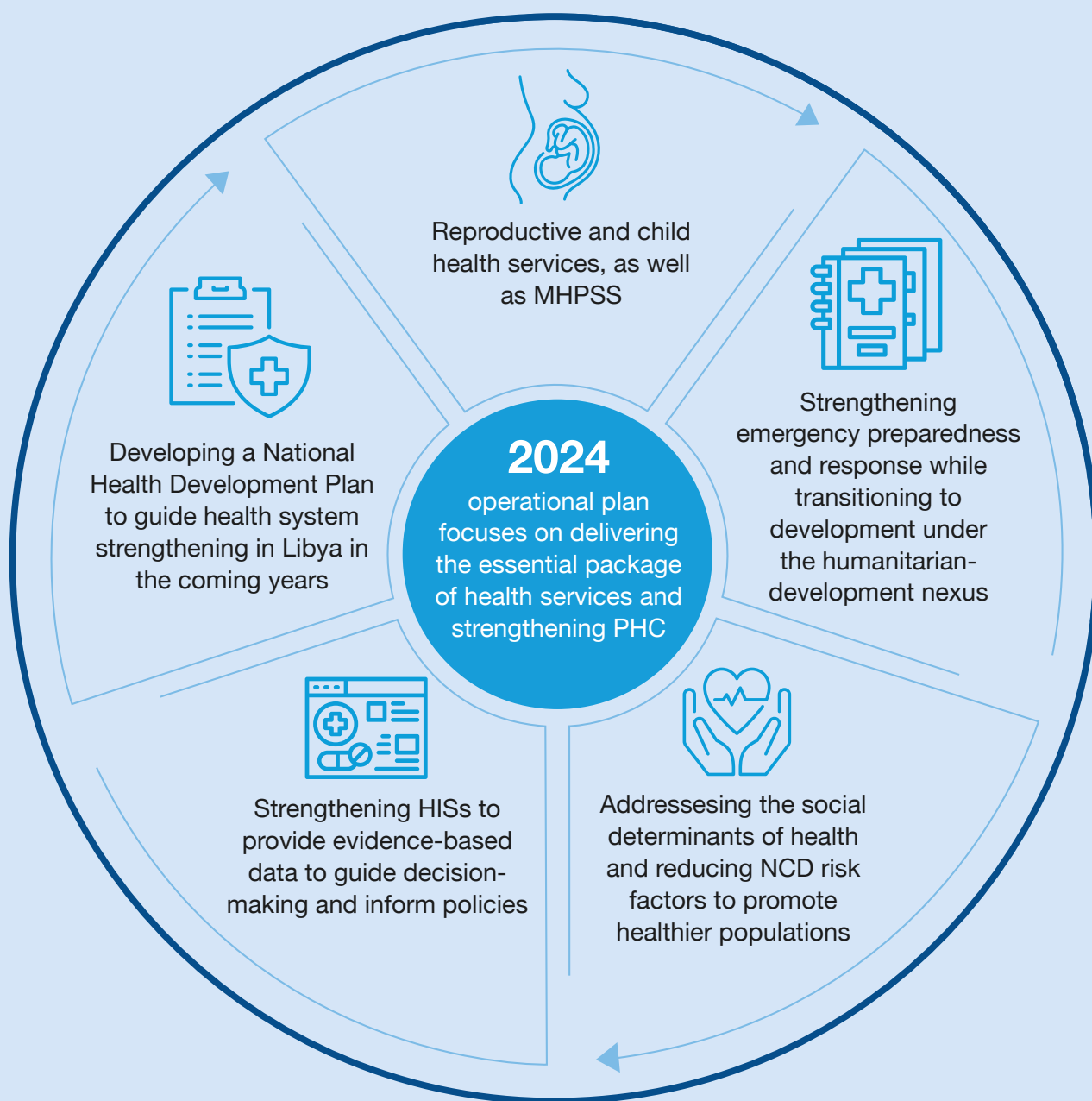


# Planned activities in 2024

In 2023, WHO in Libya worked closely with the Ministry of Health to develop the operational planning exercise for 2024–2025. In November, WHO convened a high-level event to present and endorse the developed operational plan for 2024–2025 and agreed on key programmes and interventions to be implemented to build and strengthen the health system in Libya in line with WHO's *Thirteenth General Programme of Work GPW13*.

Over the next two years, WHO and the Government of Libya will continue their health system strengthening efforts to achieve the best health outcomes while striving to promote health, serve the vulnerable and keep Libya safe from public health risks.

The plan paves the way for further collaboration on strengthening Libya's health system to advance towards the health-related SDGs. GPW 13 is based on the SDGs and sets out the vital role of WHO in their achievement.







## Way forward 2024

Moving forward, WHO will enhance strategic coordination with the Ministry of Health, strengthen governance, promote multisectoral collaboration, and advance the digitalization of health systems to improve service delivery.



Strengthening coordination mechanisms with the Ministry of Health and coordination structures



Emphasizing strategic direction in all health aspects and developing relevant health strategies



Strengthening health governance and cohesion among health stakeholders and promoting multisectoral collaboration



Adopting an all-hazards approach when strengthening emergency preparedness and response



Enhancing alignment of technical support to up-to-date global guidelines



Focusing on the digitalization of the health system to improve service delivery, especially at PHC level.



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