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## EDITORIAL

# Celebrating World Lung Day: Access to prevention and treatment for all. Leave no one behind

**ML Mazaba**

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Celebrating World Lung Day: Access to prevention and treatment for all. Leave no one behind. Health Press Bull. 2023;07(3):3-4

We join the world in celebrating this special day on 25th September, so we create awareness on what diseases threaten the health of our lungs, how to prevent some common ailments and the emphasize the importance of health lungs. The theme for the year emphasizes the significance of an equal access for all to the treatment and prevention of lung diseases ensuring healthy lungs for everyone.

The top five common lung diseases include the **Chronic Obstructive Pulmonary Disease (COPD)** mainly caused by long term exposure to irritants like for instance air pollution and tobacco smoke. COPD represents a significant public health challenge due to its high prevalence, morbidity, mortality, economic burden, and impact on quality of life. COPD can be prevented by staying away from pollutants and by avoiding cigarettes.

The next is **Asthma:** Asthma is a chronic disease affecting up to 4% globally and 6% on the African continent. It causes inflammation in the airways which can make it difficult for us to breathe. The main symptoms you should note are coughing wheezing and shortness of breath. Although it is an incurable disease Asthma is manageable

**Lung Cancer** is the third leading cause of lung diseases: The main cause of lung cancer is smoking but then again for some people it can also be genetic. The risks to lung cancer also include exposure to environmental pollutants and radon gas.

**Pneumonia** is also among the top 5 causes of lung disease commonly caused by viral or bacterial infections. Young people and elderly people are especially at very high risk. Pneumonia can be prevented by taking regular vaccines, maintaining good hygiene, and avoiding contact with an infected person.

**Tuberculosis (TB)** is a deadly bacterial disease transmitted through air, by coughing or sneezing. The 2020 statistics indicated up to 10 million new cases and 1.5 million deaths reported annually across the globe. According to the World Health Organization (WHO), TB is one of the top 10 causes of death worldwide and the leading cause of death from a single infectious agent. According to the ZNPHI Integrated Diseases Surveillance and Response bulletin, over 11,000 people had been diagnosed with TB from January to September 2023. The preventive measures are firstly, get vaccinated, secondly, get diagnosed early and religiously follow the treatment plan.

There are common Preventive Measures to avoid lung diseases including the following:

- Do not start and if already in the habit – quit smoking. Smoking can exacerbate lung diseases and cause cancer.
- Lead a physically active lifestyle.
- Eat well and eat healthy.
- Maintaining a healthy weight.
- Protect yourself from poor quality air, wear a mask in air polluted areas.
- Make sure that you are vaccinated on time and are up to date.

Healthy lungs are crucial for overall well-being and quality of life. There are several reasons why maintaining lung health is important:

- Lungs are essential for the intake of oxygen and removal of carbon dioxide from the body. Without proper oxygen intake, the body's cells, tissues, and organs cannot function optimally.
- Lungs protect vital organs like the heart by filtering out harmful particles, pollutants, and pathogens from the air we breathe. Healthy lungs help prevent respiratory infections and diseases. Furthermore, well-functioning lungs help maintain proper pH balance in the blood supporting overall metabolic processes.
- Healthy lungs support physical activity and exercise by efficiently delivering oxygen to muscles. Physical activity impacts positively on the total wellbeing of everyone.
- Lung health directly impacts quality of life. Conditions like asthma, chronic obstructive pulmonary disease (COPD), and lung cancer can significantly reduce life expectancy and diminish daily functioning.
- Lungs play a vital role in the body's immune system producing mucus and through immune cells help trap and remove harmful substances from the respiratory tract. Healthy lungs support a strong immune response, helping to protect against infections and diseases.

Taking care of your lungs can have long-term benefits for overall health and longevity. Taking proactive steps to maintain lung health is crucial for a fulfilling and healthy life. Let us by all means prevent any lung disease and if infected seek early treatment for optimal outcomes.

# Success Story

## Successful Completion & Deployment of the Viral Respiratory Disease Surveillance System: A Digital Tool Integrating Case Investigation and Genomic Sequencing Data

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Citation style for this article

Successful Completion & Deployment of the Viral Respiratory Disease Surveillance System: A Digital Tool Integrating Case Investigation and Genomic Sequencing Data. Health Press Bull. 2023;07(3): 5

The Zambia National Public Health Institute (ZNPHI) announced the successful completion and deployment of a Viral Respiratory Disease Surveillance System (VRDSS). This is a comprehensive digital toolkit that integrates clinical and epidemiological data, laboratory diagnostic results, and genomic data for COVID-19, with the capability to expand to include data from other pathogens as they become available. The VRDSS provides analytical outputs that can be adapted to various settings, serving as valuable insights for public health authorities and policymakers in Zambia to identify early signs of health threats and implement preventive measures.

This undertaking is made possible with technical and financial support from FIND, the global alliance for diagnostics. FIND partnered with KLINEX Limited, a Zambian-based consulting firm for the development and implementation of this digital toolkit. The emergence and rapid spread of viral respiratory diseases have highlighted the importance of robust surveillance systems. Traditional methods often face challenges in timely and accurate data collection, integration, and analysis. VRDSS was designed to address these limitations and provide an integrated and seamless approach to surveillance.

The toolkit simplifies the process of case investigation, automating the process of comprehensive data gathering, management, and analysis from case presentation to genomic sequencing. It consists of a user-friendly interface that collates information from existing, standardized surveillance forms, generates a single, patient-level database that is analyzed automatically, and produces a standardized and usergenerated analytical output that can be used for reporting, as well as serve as an early warning system. Integration of genomic sequencing data allows for a deeper understanding of viral respiratory diseases by identifying specific strains, mutations, and transmission patterns. The toolkit seamlessly integrates this vital information to enrich case investigation and enhance disease surveillance. Additionally, near real-time data monitoring and reporting capabilities enable timely identification of disease outbreaks, hotspot areas, and potential threats such as new emerging variants. This feature allows public health authorities to make informed decisions and implement effective control measures swiftly.

## Perspective

# JOINT EXTERNAL EVALUATION MEETING

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Citation style for this article

Joint External Evaluation Meeting. Health Press Bull. 2023;07(3).6-8

The second Joint External Evaluation, convened by the Zambia National Public Health Institute (ZNPHI), assessed Zambia's compliance with the International Health Regulations (IHR) core capacities, using the WHO IHR Joint External Evaluation (JEE) tool. The evaluation was conducted in October 2023 by a team of external experts with international experience in diverse technical areas, engaging with technical experts from Zambia's government bodies, academic institutions, and development partners. It involved discussions across all technical areas stipulated in the JEE tool, site visits at national and sub-national levels, and resulted in collaborative development of priority actions. The comprehensive report provides technical area scores, strengths, challenges, and specific recommendations, with an emphasis on identified cross-cutting themes that require immediate attention for enhanced public health security.

Zambia has demonstrated significant progress in strengthening preparedness, early detection, and rapid response to public health emergencies. ZNPHI, legally designated as the National IHR Focal Point, and the Public Health Emergency Operation Centre (PHEOC) are pivotal entities, playing a central and indispensable role.

The country's commitment to implementing IHR (2005) is evident through its comprehensive legal framework, enabling effective response to global health threats. Zambia's strong focus on the One Health approach, recognizing the interconnections between human, animal, and environmental health, has been instrumental in addressing zoonotic diseases and reinforcing food safety surveillance among others.

Additionally, Zambia's achievements in immunization programs, especially the high coverage of measles vaccines, reflects its capacity to deliver vaccines efficiently and effectively, safeguarding the population against vaccine-preventable diseases. The country boasts a well-established network of laboratories accredited to ISO standards, supported by proficiency testing programs and a robust legal framework for laboratory licensing.

Significant advancement in surveillance has been evidenced through effective implementation of Integrated Disease Surveillance and Response (IDSR) guidelines and an All-Hazards Preparedness and Response plan.

The system's effectiveness is further enhanced by integration of Event-Based Surveillance for early event detection and reporting, along with Indicator-Based Surveillance.

Despite ongoing efforts, Zambia has not fully met the required IHR core capacities. The full integration of the environmental, livestock, and wildlife sectors into IHR implementation remains incomplete, posing potential gaps in the overall public health security framework. Fragmented legislation across various sectors complicates a coordinated response to public health emergencies. There is inadequate domestic financing for implementation of IHR activities and response to public health emergencies. The interoperability of electronic Integrated Disease Surveillance and Response (eIDSR) systems across various levels has not yet been fully achieved, which impacts the efficiency of disease surveillance. Notably, the country lacks a comprehensive national regulatory framework for biosafety and biosecurity, coupled with limited laboratory capacity for confirming and monitoring antimicrobial resistance (AMR).

Zambia's public health security is further challenged by the absence of a surge workforce strategic plan, a national healthcare-associated infection surveillance plan, and comprehensive essential health services guidelines, highlighting urgent concerns.

The country encounters difficulties in dealing with chemical risks due to limitations in laboratory capacity, financial and human resource constraints, and coordination issues among government agencies. Similarly, the country's readiness to respond to radiation emergencies is hindered by inadequate infrastructure, including a lack of detection equipment and healthcare facilities.

Highlighted below are the overarching strengths:

- A strong ZNPHI that provides a foundation of public health emergency management.
- Existence of DMMU structures across the levels enhances emergency management efforts.
- Demonstration of high-level political will and a whole of government approach
- Existence of multisectoral coordination using the one health coordination platform
- Legal instruments, guidelines, protocols, and formalized systems in place
- Strong support and collaboration from partners during public health emergencies and IHR implementation
- Dedicated human resources to support health emergencies.
- Existence of an electronic surveillance system
- Presence of PHEOC to support coordination of partners and emergency response.

Despite the progress the Zambian Government has made in the implementation of IHR, a few areas still need strengthening:

- Improving documentation and archiving of essential documents
- Accelerating the signing of key documents (legislation, policies, and guidelines) to facilitate effective implementation.
- Developing and implementing a well-defined structure for sharing strategic health information, guidelines, SOPs, and plans
- Institutionalizing review processes, After-Action Reviews (AARs), and Simulation Exercises (SIMEX) to validate capacities and test systems.

In conclusion, sustaining the gains made over the past five years and strengthening the existing linkages with partners to ensure sustainable funding for IHR implementation will advance national health security. There is need to have a stronger integration of activities between the animal, environment, and human sectors. Zambia will have to develop a National Action Plan for Health Security (NAPHS) to aid the implementation of the agreed priority actions.

## Research Articles

# The Crucial Roles of Pharmacists in Combating Antimicrobial Resistance: A Comprehensive Examination of Infection Prevention, Antimicrobial Stewardship, and Zambia's National Action Plan

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Citation style for this article

McLawrence Phiri, The Crucial Roles of Pharmacists in Combating Antimicrobial Resistance: A Comprehensive Examination of Infection Prevention, Antimicrobial Stewardship, and Zambia's National Action Plan. Health Press Bull. 2023;07(3): 9-12

## Introduction

Antimicrobial Resistance (AMR) poses a significant and escalating threat to global public health, challenging the efficacy of antibiotics and other antimicrobial agents. Mitigating this crisis demands collaborative efforts from healthcare professionals worldwide, and pharmacists emerge as key players in this battle. This article delves deeper into the multifaceted contributions of pharmacists in addressing AMR, placing a spotlight on infection prevention, antimicrobial stewardship, the tools harnessed in the fight against AMR, and the pivotal role of Zambia's National Action Plan in tackling this pressing public health concern.

I. Infection Prevention

Infection prevention forms the bedrock of efforts against AMR, and pharmacists play a pivotal role in promoting practices that reduce the spread of infections. Pharmacists, positioned as integral members of healthcare teams, actively engage in multifaceted strategies to educate both healthcare professionals and the public on essential hygiene practices, vaccination strategies, and the judicious use of antimicrobials.

*Patient Education:*
Pharmacists are frontline educators, providing patients with comprehensive information on the significance of completing prescribed antibiotic courses, the importance of proper hand hygiene, and the critical role of vaccination in preventing infectious diseases. This educational initiative empowers patients to actively participate in infection prevention, thereby reducing the need for unnecessary antimicrobial treatments.

*Collaboration with Healthcare Providers:*
In healthcare settings, pharmacists collaborate closely with other healthcare providers to implement robust infection control measures.

This involves monitoring and implementing policies that prevent the transmission of infections within hospitals, clinics, and other healthcare facilities. By fostering a collaborative approach, pharmacists contribute significantly to minimizing the risk of infection and subsequent antimicrobial treatment.

II. Antimicrobial Stewardship

Antimicrobial stewardship involves optimizing the use of antimicrobial agents to treat infections while minimizing the development of resistance. Pharmacists, leveraging their expertise in medications, actively spearhead antimicrobial stewardship programs.

*Optimizing Antibiotic Prescribing:*

Pharmacists collaborate closely with physicians to ensure the judicious use of antibiotics. They review prescriptions to guarantee the correct drug, dose, and duration are prescribed, and provide alternative suggestions when necessary. This collaborative effort ensures that antibiotics are prescribed only when necessary, minimizing the risk of resistance development.

*Optimizing Antibiotic Prescribing:*

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*Monitoring Adverse Effects:*

As vigilant overseers of patient care, pharmacists monitor individuals undergoing antimicrobial treatments for adverse effects. This proactive approach assists in identifying and managing potential complications, contributing to the overall safety and effectiveness of antimicrobial therapies. By closely monitoring patients, pharmacists enhance the quality of care while minimizing the risk of adverse events.

III. Tools Used in the Fight Against AMR

Pharmacists employ an array of tools to combat AMR, utilizing technology, research, and ongoing education to stay abreast of the latest developments and challenges.

*Pharmacovigilance Systems:*

Pharmacists actively engage with pharmacovigilance systems to monitor and report adverse drug reactions. These systems provide invaluable data that contributes to a better understanding of the safety profiles of antimicrobial agents. By participating in pharmacovigilance, pharmacists play a crucial role in identifying emerging trends in resistance and adverse reactions.

*Electronic Health Records (EHRs):*

Electronic Health Records (EHRs) serve as invaluable tools in the pharmacist's arsenal, facilitating seamless communication between healthcare professionals. Pharmacists utilize EHRs to track antimicrobial prescriptions, monitor patient histories, and identify trends that may indicate inappropriate prescribing practices. The utilization of EHRs enhances collaboration among healthcare providers, fostering a comprehensive and integrated approach to patient care.

*Continuing Education:*

Staying abreast of the latest advancements in infectious diseases and antimicrobial therapies is paramount for pharmacists. Continuous education programs provide pharmacists with the necessary knowledge and skills to remain updated on best practices and emerging challenges in the field of AMR. By investing in ongoing education, pharmacists ensure their readiness to adapt to the evolving landscape of infectious diseases and antimicrobial treatments.

IV. Zambia's National Action Plan

In the context of Zambia, a comprehensive National Action Plan is imperative for addressing

the challenges posed by AMR. Pharmacists in Zambia play a pivotal role in implementing and supporting the strategies outlined in the national plan.

*Policy Implementation*:
Pharmacists actively contribute to the implementation of AMR policies at various levels, ensuring that guidelines and recommendations are effectively translated into practice within healthcare settings across the country. By actively participating in policy implementation, pharmacists contribute to a standardized and coordinated approach to combating AMR.

*Public Awareness Campaigns*:
Pharmacists take a lead role in public awareness campaigns, reaching out to communities to educate them about the responsible use of antimicrobials. These campaigns emphasize the importance of completing prescribed courses, proper hand hygiene, and the collective responsibility of every individual in combatting AMR. By fostering public awareness, pharmacists contribute to building a knowledgeable and proactive community in the fight against AMR.

*Collaboration with Stakeholders:*
Pharmacists act as crucial liaisons between various stakeholders, including government agencies, healthcare institutions, and non-governmental organizations. Through active collaboration, pharmacists ensure a comprehensive and coordinated effort in surveillance, prevention, and control of AMR in Zambia. By fostering partnerships, pharmacists contribute to a unified front against AMR, ensuring a holistic and sustained approach to this global health challenge.

In conclusion, pharmacists emerge as indispensable protagonists in the global fight against Antimicrobial Resistance. Their multifaceted involvement in infection prevention, antimicrobial stewardship, and the implementation of tools to combat AMR significantly contributes to safeguarding the efficacy of antimicrobial agents.

In Zambia, the National Action Plan serves as a guiding framework, with pharmacists playing a central role in its implementation. As the world grapples with the complex challenges of AMR, recognizing and supporting the pivotal roles of pharmacists is essential for sustainable progress in safeguarding the effectiveness of antimicrobial treatments and ensuring global public health.

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## Summary of outbreaks

### Measles Outbreak

While the second quarter offered initial hope with a decrease in confirmed cases of measles, the subsequent period witnessed a concerning upward trend. A total of 2,027 suspected cases were reported in the third quarter (up from 950 in Q2). The suspected cases were recorded as follows Northern Province continues to report the highest number of suspected cases (711) Northwestern Province 456 cases Luapula Province 353 cases, Muchinga Province 206 cases, Central Province 139 cases, Eastern Province 78 cases, Lusaka Province 37 cases, Copperbelt Province 23 cases, Southern Province 14 cases, Western Province 10 cases. Measles is highly contagious and achieving herd immunity through widespread vaccination coverage (at least 95%) is crucial. The MoH continues to implement the ongoing vaccination efforts and remains committed to controlling the measles outbreak and protecting public health.

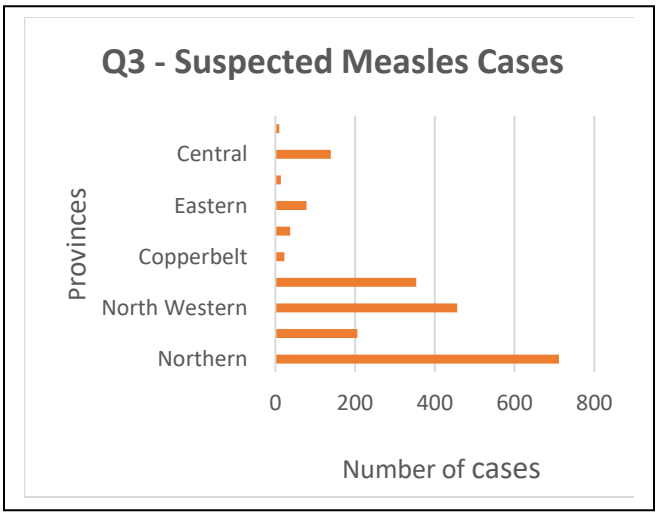


Fig 1.1 Graph showing suspected Measles Cases per Province for Q3 2023.

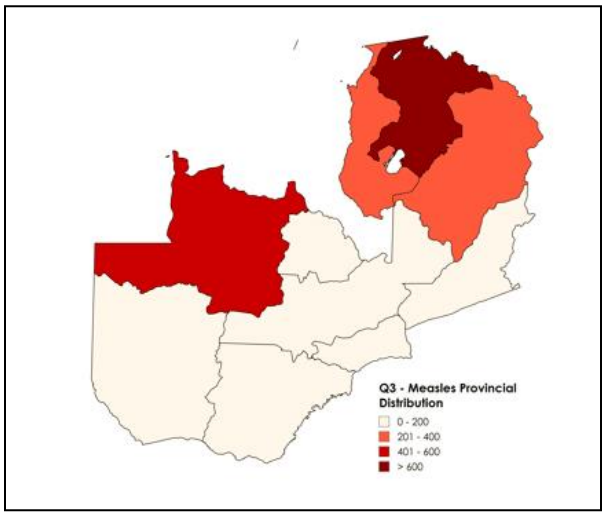


Fig 1.2 Map showing suspected Measles cases for Q3 2023.

## Mumps

In Zambia, vaccine-preventable diseases disproportionately affect the unimmunized population. Mumps, a viral disease with serious potential complications, has shown a significant rise in suspected cases, prompting laboratory investigations.

A total of 18,256 suspected cases were reported, revealing a high positivity rate Southern Province reported the highest number of cases 3,963 cases, followed by Central 3,663 cases, Eastern 2,545 cases, Copperbelt 2,048 cases, Western 1482 cases, Northern Western 1,362 cases, Lusaka 1,327 cases, Muchinga 876 cases, Northern 524 cases and 493 cases in Luapula. This data emphasizes the critical role of vaccines in preventing mumps and its complications.

Vaccines are one of the most effective and safe preventive measures available to protect individuals and communities from infectious diseases like mumps. They work by exposing the body to a weakened or inactive form of a virus or bacteria, which helps the body develop immunity without experiencing the full-blown illness. Vaccines remain crucial in the fight against mumps by providing individual protection, herd immunity and reduced healthcare burden.

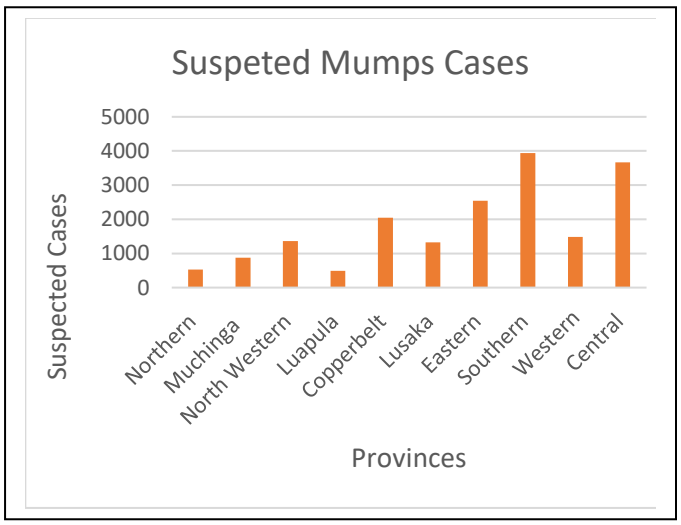


Fig 2.1 Graph showing suspected Mumps Cases per Province for Q3 2023.

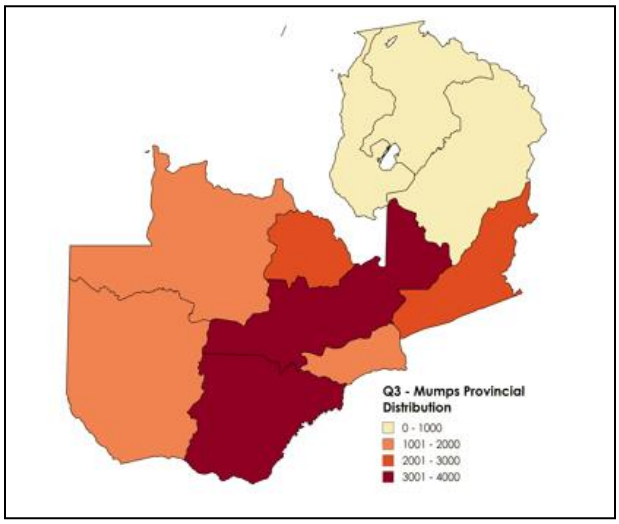


Fig 2.2 Map showing suspected distribution of Mumps per province for Q3 2023.

## Scabies

Scabies, a neglected tropical disease, remains a significant concern in subtropical regions like southern Africa, including Zambia. Characterized by intense itching and skin irritation, scabies thrives in conditions of poor hygiene and compromised immunity, affecting an estimated 200 million people worldwide annually. While not fatal, scabies can significantly decrease quality of life.

In Zambia, scabies cases remain a challenge. The number of suspected cases reported in the third quarter of 2023, at 33,667, a slight reduction from the 34,553 suspected cases recorded in Q2, highlights the ongoing public health concern. The highest number of suspected cases was in Northern Province with a total of 5,971 cases, while Luapula recorded 4,794 cases, 3,785 cases in Western, 3,547 cases in Central, 3, 285 in Eastern, 2,344 in Northwestern, 2,246 in Copperbelt, 1,855 in Lusaka and 1,650 in Muchinga Province

To combat scabies in Zambia, improve hygiene education, water access, and sanitation. Strengthen healthcare for diagnosis and treatment. Increase public awareness of symptoms and prevention. These strategies are key to reducing the burden of scabies.

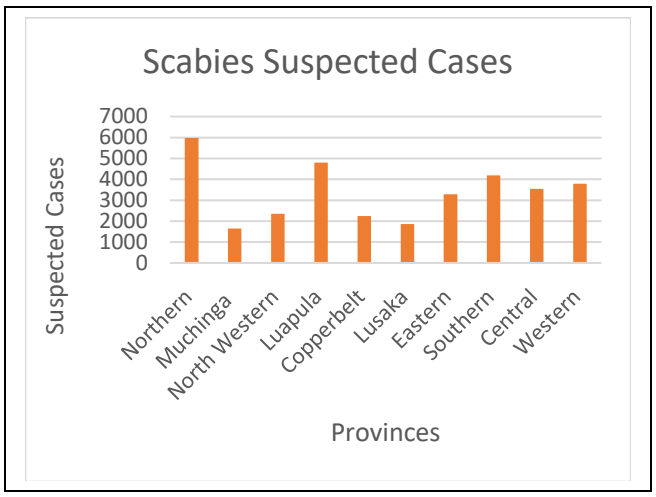


Fig 3.1 Graph showing suspected Scabies Cases per Province for Q3 2023.

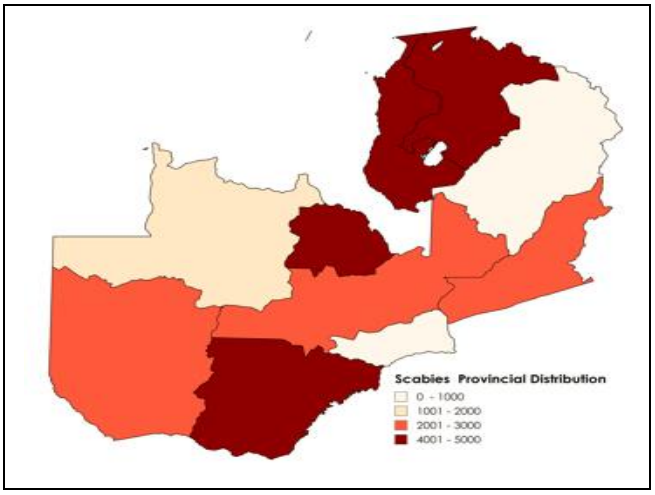


Fig 3.2 Map showing suspected Scabies cases for Q3 2023.

## Summary Report Priority Diseases, Conditions and Events (Week 26-39)

| Disease/Event/Condition | Week 27 – Week 39 | | |
|---|---|---|---|
| | Suspected | Tested | Confirmed |
| COVID-19 | 384,133 | 384,133 | 14,710 |
| HIV | 1,158,400 | 1,302,323 | 47,814 |
| Malaria | 8,376,070 | 8,264,923 | 4,183,300 |
| Non bloody diarrhea | 568,607 | 22,004 | 16,147 |
| Maternal deaths | N/A | N/A | 561 |
| Influenza | 736 | 735 | 13 |
| Dysentery | 23,462 | 1,724 | 351 |
| AFP | 427 | 427 | 2 |
| Cholera | 884 | 855 | 346 |
| Measles | 4,418 | 1,169 | 378 |
| Scabies | 102,255 | 5,121 | 3,361 |
| Mumps | 59,221 | 821 | 429 |

# Specific diseases and summarized conditions

## Maternal Mortality

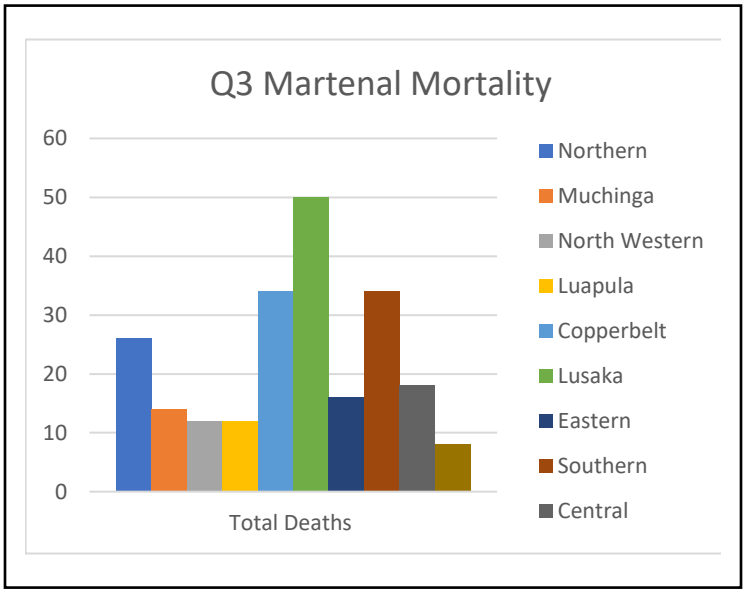


Fig 4.1 Graph showing maternal mortality per Province in Q3 for 2023.

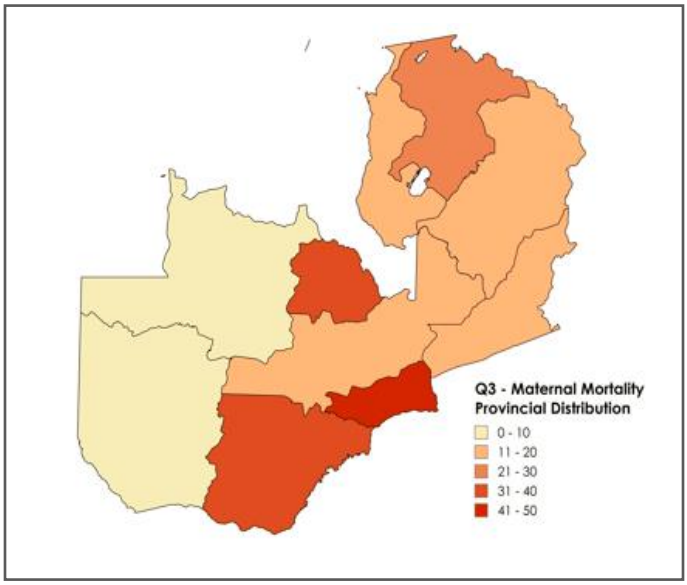


Fig 4.2 Map showing maternal mortality per province in Q3 for 2023.

While maternal mortality, the death of a woman during pregnancy or childbirth, remains a significant global public health concern, especially in Sub-Saharan Africa. The third quarter (Q3) of 2023 saw a decrease in maternal mortality cases compared to previous quarters, with a total of 181 deaths recorded, representing a downward trend from the 387 cases recorded in quarter 3.

Lusaka Province. The most populous region still had the highest number of deaths at 40, followed by Southern Province with 31. Copperbelt Province recorded 25 deaths, while Northern Province had 16, Eastern and Central Provinces each reported 14 deaths, and Muchinga and Northwestern Provinces both had 11. Western Province recorded 7 deaths, the lowest number amongst all provinces.

Despite the positive trend, hemorrhage remains the leading cause of maternal mortality across all ten provinces in Zambia. This emphasizes the critical need for continued efforts to improve access to quality healthcare, including skilled birth attendants and emergency obstetric care, to ensure the safety and well-being of mothers during childbirth.

# Acute Flaccid Paralysis

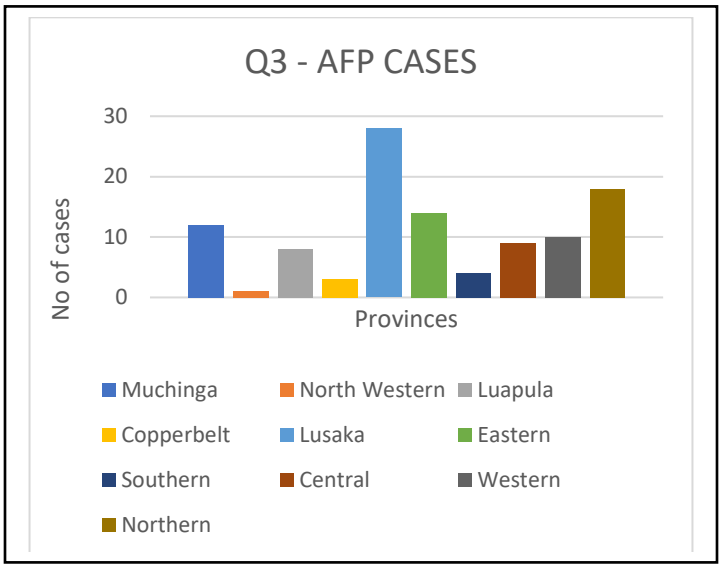


Fig 5.1 Graph showing suspected AFP Cases per Province for Q3 2023.

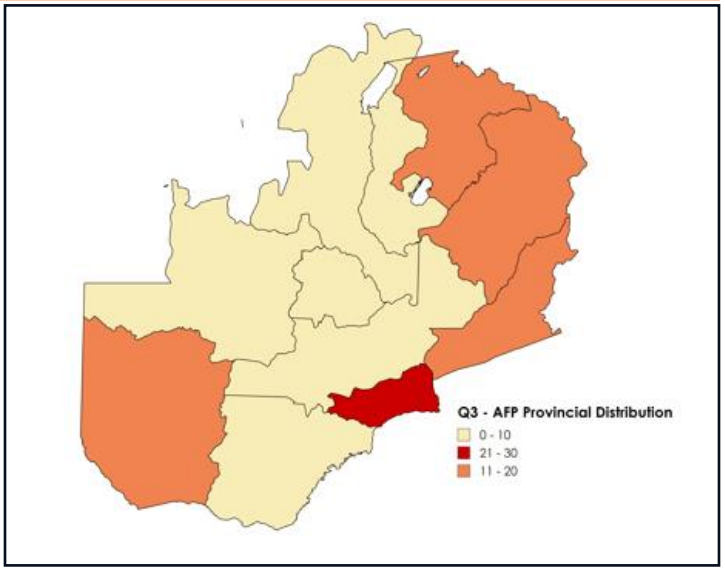


Fig 5.2 Map showing suspected AFP cases in Q3 2023

Acute Flaccid Paralysis (AFP) surveillance plays a crucial role in the global fight against polio, acting as the early warning system for potential polio outbreaks. Encouragingly, Q3 of 2023 saw a positive trend in suspected AFP cases, with 107 cases reported, representing a significant decrease compared to the 210 cases identified in Q2 2023.

Most of the suspected cases were recorded in Lusaka with 28 cases, Northern with 18 cases, Eastern with 14 cases while the least number of cases were recorded in Northwestern Province with 1 case. While no confirmed polio cases have been reported in 2023 so far, this downward trend and continued surveillance continues to be a key component in the Fight against polio.

# Cholera

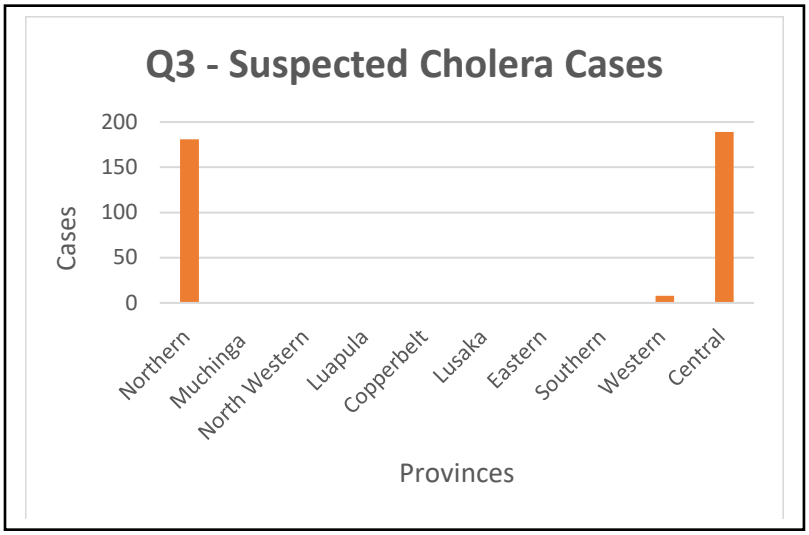


Fig 6.1 Graph showing suspected cholera Cases per Province for Q3 2023.

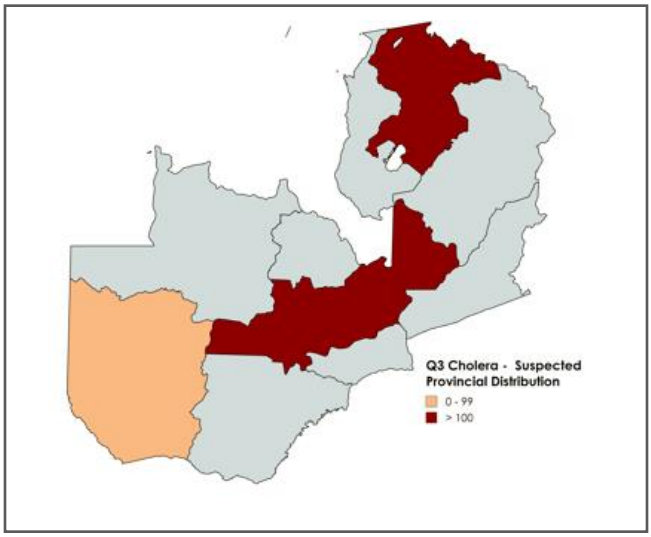


Fig 6.2 Map showing suspected cholera cases for Q3 2023

Since mid-2021, cholera, a highly infectious diarrheal disease caused by contaminated water or food, has seen a concerning surge, marking the ongoing seventh pandemic. This outbreak affects over 60 countries, particularly those lacking proper sanitation and clean water.

Cholera has become endemic in Zambia since the 1978/1979 outbreak. The country experienced a major outbreak in 1990 and has registered cases yearly since then, except for 1994/1995. Most cases are concentrated in fishing camps and peri-urban areas of Lusaka and the Copperbelt province. Notably, within Lusaka, severe cases and deaths have been reported primarily in the western suburbs, where sanitation has generally been poor.

Furthermore, the World Health Organization (WHO) reports 17 African countries with reported cases in the past two years, with Zambia and Zimbabwe experiencing a particularly worrying rise. In Q3 there was a surge in the number of Suspected cases of Cholera reported with a total of 189 cases reported in the country. Northern Province recorded 181 suspected cases while Western Province recorded 8 cases.

# Dysentery

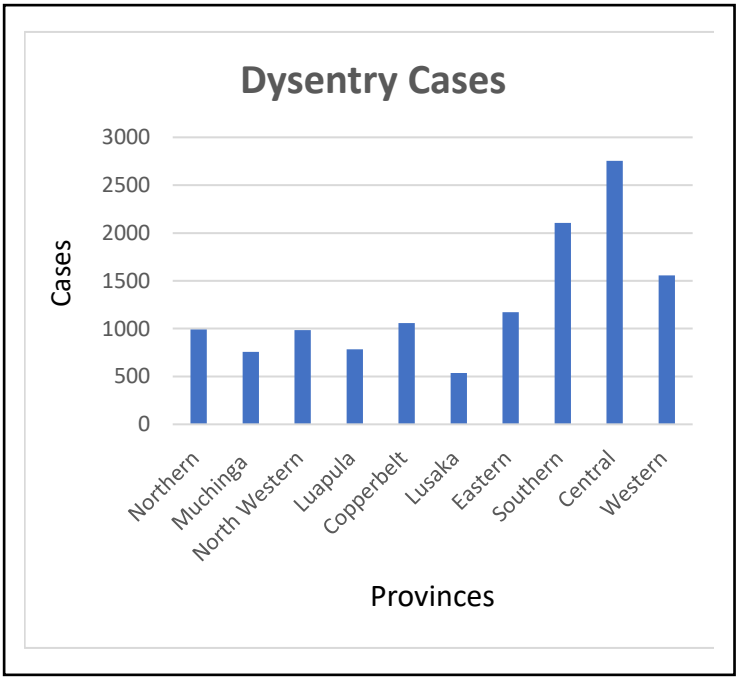


Fig 7.1 Graph showing suspected Dysentery Cases per Province for Q3 2023.

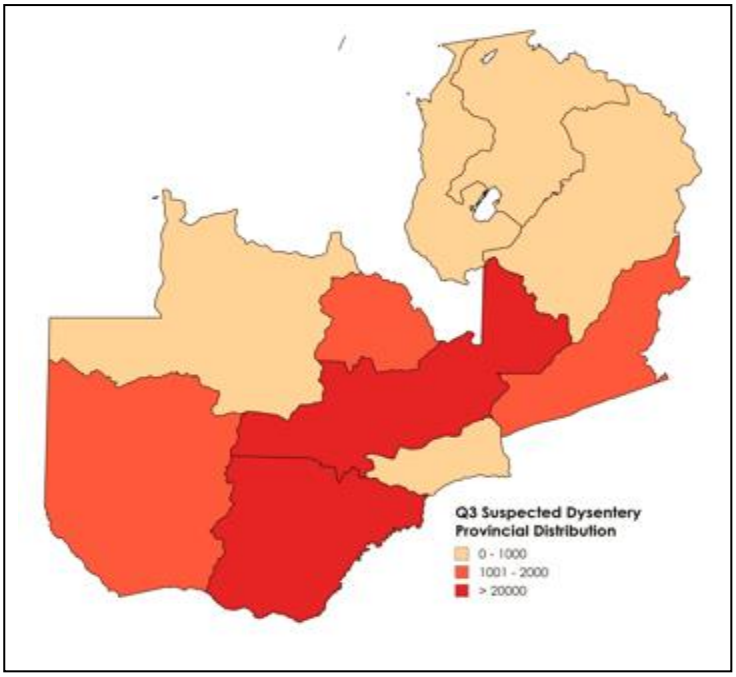


Fig 7.2 Map showing suspected Dysentery cases for Q3 2023

ZNPHI is committed to providing regular updates about dysentery in Zambia. These statistics focus on the situation in the third quarter of 2023 (weeks 27-39). The third quarter saw a concerning increase in suspected dysentery cases compared to the second quarter. A total of 10,007 cases were reported, significantly higher than the 6,121 cases reported in Q2.

The data revealed a significant geographical disparity in case distribution with Southern Province reporting the highest number of suspected cases 2,015, while Western Province 1,557cases, Eastern Province 1,171, Copperbelt Province 1,059, Northern Province 990, Northwestern Province 986 cases, Luapula Province 783 cases, Muchinga Province 757 cases, Lusaka Province 535 cases and Central Province 64 cases.

# Typhoid

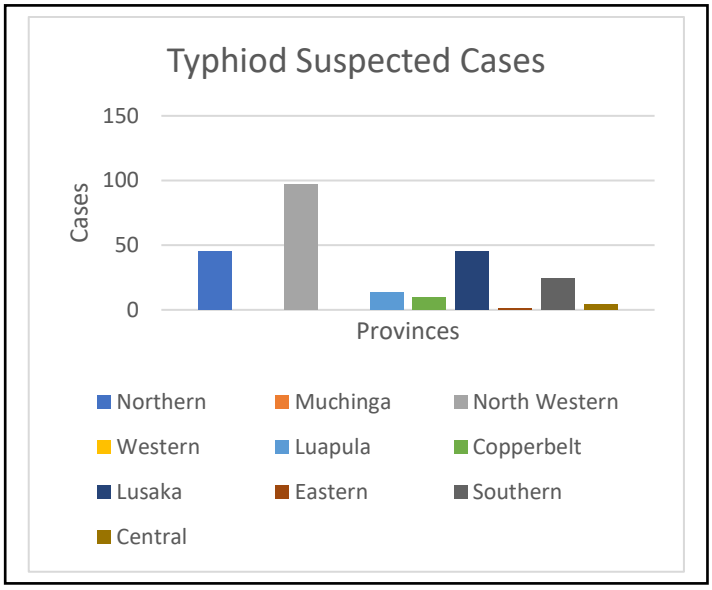


Fig 8.1 Graph showing suspected Dysentery Cases per Province for Q3 2023.

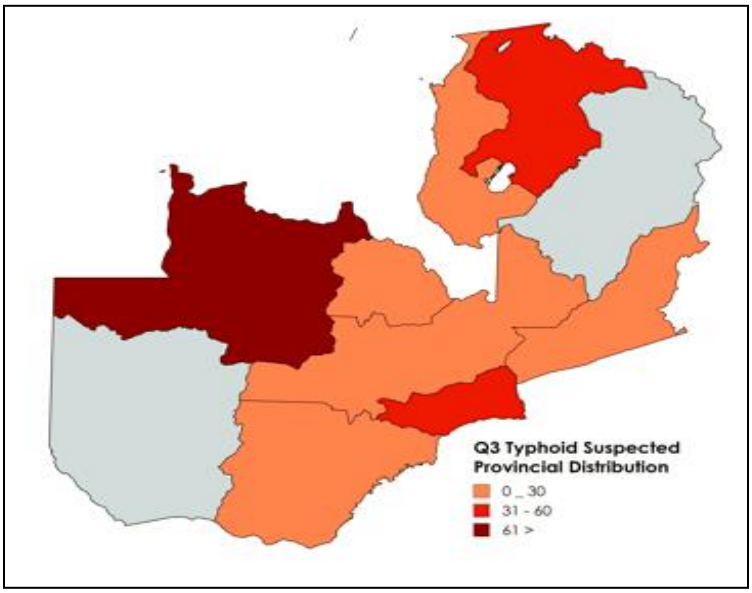


Fig 8.2 Map showing suspected cholera cases for Q3 2023

Enteric fever thrives in environments with poor sanitation, sewage, and water treatment systems. This disease is particularly prevalent in tropical climates like Zambia, where new cases are rising due to population growth, pollution, and limited access to clean drinking water.

In Zambia, the third quarter saw a decrease in the number of suspected cases which was 240 compared to the 6,121 suspected cases recorded in Q2 highlighting. The cases were recorded as 97 in Northwestern, 45 in both Lusaka and Northern Province, 24 in Southern Province, 14 in Luapula, 10 in the Copperbelt, 4 in Central and zero cases in both Muchinga and Western Province

Effective strategies to combat enteric fever focus on improving WASH (Water, Sanitation, and Hygiene) systems. This includes ensuring access to clean water, proper sanitation facilities, and promoting good hygiene practices. Additionally, vaccination plays a crucial role in preventing typhoid fever. By implementing these measures and understanding the geographical distribution of cases, Zambia can significantly reduce the burden of enteric fever and protect public health.

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