

How Legal Preparedness Can Improve Diphtheria outcomes in Nigeria.

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Introduction

Diphtheria, a preventable bacterial infection, has reemerged as a significant public health challenge in Nigeria. The recent death of a student at King's College Lagos highlights the severity of the situation. On March 6, 2025, a 12-year-old student at King's College Lagos succumbed to myocarditis, a severe complication of diphtheria. Fourteen other students were hospitalized, and 34 close contacts have been placed under observation. The Lagos State government responded swiftly by activating an Emergency Response Committee and announced plans of mass vaccination campaigns targeting schoolchildren.¹ This tragic incident is a reminder of the gaps that contain to exist in our public health system, particularly in the areas of vaccination coverage and disease surveillance.

Immunisation for diphtheria is covered under Nigeria's Expanded Programme on Immunization.² The EPI covers the Pentavalent vaccine (DTP3), which protects against diphtheria, tetanus, pertussis, hepatitis B, and Haemophilus influenzae type b. However, cases of infection continue to surge as a result of low vaccination.³ Nigeria's overall vaccination coverage ranges from less than 20% to 80%, with an average of 56%, reflecting substantial gaps in routine immunisation.⁴ A 2022 report shows that Nigeria was reported to be amongst 10 countries that had just less than 60% of its infants not fully vaccinated underscoring the low vaccination coverage.⁵

Health security and immunization are closely linked, as effective vaccination programs are essential for preventing infectious disease outbreaks and strengthening national health resilience. Immunization reduces the spread of vaccine-preventable diseases like measles, polio, and diphtheria, which, if left unchecked, can escalate into large-scale health crises. In Nigeria, gaps in vaccination coverage have contributed to recurring outbreaks of such diseases, underscoring the urgent need for strengthened immunization strategies to enhance health security.

This article aims to look into the Nigeria's legal and policy framework for immunisation within the broader context of health security. Additionally, it explores the extent to which existing laws support early detection and reporting. By identifying legal and policy gaps, the article aims to

¹Deadly Diphtheria Hits Kings College Lagos, One Student Died, 14 Hospitalized.

<https://saharareporters.com/2025/03/11/deadly-diphtheria-hits-kings-college-lagos-one-student-dead-14-hospitalised>

² The EPI was introduced in Nigeria as the National Program on Immunization (NPI) and has evolved significantly over the year

³ Doctors Without Borders., "Nigeria: Routine vaccinations are key to curbing diphtheria outbreak". Available online at

<https://www.doctorswithoutborders.org/latest/nigeria-routine-vaccinations-are-key-curbing-diphtheria-outbreak>

⁴ Afshan Raza., Vaccination gaps and resurgence of diphtheria in Nigeria: An outbreak simmering for a catastrophe" available online at <https://pmc.ncbi.nlm.nih.gov/articles/PMC10590836/>

⁵ Ibid

provide recommendations for improving Nigeria's capacity to prevent and responding to diphtheria and other vaccine-preventable diseases.

2. Diphtheria in Nigeria

Diphtheria, a contagious vaccine-preventable disease is caused by toxins producing bacteria (*Corynebacterium diphtheriae*). The disease spreads through respiratory droplets when an infected person cough or sneezes.⁶ It can also be transmitted through contact with contaminated objects, such as used tissues or hand towels.⁷ The toxin produced by the bacteria primarily harms the respiratory system and can spread to other parts of the body. In advanced stages, the disease can damage the heart, kidney and nervous system with typical symptoms including fever, a sore throat, swollen neck glands, nasal discharge, fever and chills, amongst others. Diphtheria can affect individuals of all ages. However, unimmunised children or incompletely vaccinated individuals are more susceptible to the risk of infection.⁸

A nationwide diphtheria immunity survey shows that only 42% of children under 15 years old are fully protected from diphtheria.⁹ This abysmal figure calls for urgent vaccination penetration across all age demographic particularly children. Besides low vaccination coverage, other factors driving the emergence of the disease in Nigeria include inadequate vaccination storage, poor collaboration between relevant authorities, weak surveillance system for the identification and notification of diphtheria, inadequate, poor infection prevention and control measures funding amongst others.¹⁰

From May 2022 to March 2023, over 389 cases of infection were confirmed across 6 different states.¹¹ According to the Nigeria Centre for Disease Control and Prevention, from epidemiological week 19 of 2022 to epidemiological week 10 of 2023, a total number of 42,642 cases were reported from 37 states of the federation, amounting to 1319 deaths amongst the confirmed cases.¹² The NCDC report shows that the northern states of Kano, Bauchi, Yobe, Katsina, Borno, Kaduna and Jigawa accounted for 96.3% of the suspected cases.¹³ Of the 42,642 cases, 25,812 (60.5%) were confirmed. Kano State recorded the highest number of confirmed cases with 18,108, followed by Bauchi with 2,334, Yobe with 2408, Katsina with 1501, Borno with

⁶Mayo Clinic., "Diphtheria" available online at <https://www.mayoclinic.org/diseases-conditions/diphtheria/symptoms-causes/syc-20351897>

⁷ World Health Organisation., "Diphtheria" available online at <https://www.who.int/news-room/fact-sheets/detail/diphtheria>

⁸Mayo Clinic., "Diphtheria" available online at <https://www.mayoclinic.org/diseases-conditions/diphtheria/symptoms-causes/syc-20351897>

⁹IFRC., "Nigeria Diphtheria Outbreak" available online at <https://adore.ifrc.org/Download.aspx?FileId=836507>

¹⁰ Health Science Report., Tolupe J., "The re-emergence of diphtheria in Nigeria: Descriptive assessment of the post-COVID-19 crisis management" available online at <https://onlinelibrary.wiley.com/doi/full/10.1002/hsr2.1680>

¹¹ World Health Organisation., "Diphtheria outbreak response-Lagos State sensitizes communities on vaccine efficacy" available online at <https://www.afro.who.int/countries/nigeria/news/diphtheria-outbreak-response-lagos-state-sensitizes-communities-vaccine-efficacy>

¹²All Africa., "More Nigerian's Die as Diphtheria Case Spread", available online at <https://allafrica.com/view/group/main/main/id/00092189.html>

¹³ Ibid

1161, Jigawa with 53 cases and Kaduna with 44 cases.¹⁴ Children continue to be disproportionately affected by this disease with children aged 0-14 making up 62.9% (16,234) of the confirmed cases with only 19.3% (4,981) of children fully vaccinated. This led NCDC to declare the outbreak as the worst in a decade, with the previous outbreak occurring in 2011 in Nigeria.¹⁵

Although the above-mentioned states have previously recorded high cases of infection, recent epidemiological data from week 10 of 2025 indicates that Lagos now has the highest number of cases, accounting for 20 out of 23 suspected cases. This surge is linked to the recent outbreak at Kings College, where 14 students were infected, resulting in one fatality.¹⁶ As of the 1st week in April, Lagos state has confirmed 10 cases of diphtheria affecting several Local Government Areas (LGAs). Eti-Osa, currently has the highest number of suspected cases in Lagos with 44.¹⁷ The latest epidemiological data from week 11 of 2025 shows that a total of 16 suspected cases were reported mostly from 2 states across 4 LGAs.¹⁸

It seems clear that effort to stem the tide of infections through immunisation, surveillance and detection, reporting and treatment, must be intensified. A key question arises with respect to the legal and policy environment for diphtheria prevention and response and, more broadly, health security: is immunisation mandatory? What are the tools provided by law for preparing for and responding to public health threats? Are there particular protections for children?

3. Legal and Policy Framework for Nigeria's Health Security Response

Nigeria's response to infectious disease outbreaks is governed by a legal and policy framework designed to safeguard public health and ensure national preparedness which constitutionally operates at two levels, state and federal levels. Several key laws and regulations at the national level outline the roles and responsibilities of government agencies in preventing, managing, and mitigating public health threats. Other crucial laws operate at the the State level.

The National Health Act (2014) is the key legal instrument that governs the health system in Nigeria. It establishes the legal foundation for Nigeria's health system, setting standards for the provision of public health services, including those required to combat emerging infectious diseases.¹⁹ The Public Health Ordinance 1958, which laid the foundation for public health regulations in the country, and amongst other things provides for mandatory reporting of infectious diseases like smallpox, cholera and tuberculosis.²⁰

¹⁴Premium Times., "Diphtheria, Lagos Leads as Nigeria Records 25 New Infections" available online at <https://www.premiumtimesng.com/health/health-news/781361-diphtheria-lagos-leads-as-nigeria-records-23-new-infections.html>

¹⁵ Nigeria., Diphtheria Outbreak
<https://adore.ifrc.org/Download.aspx?FileId=836507>

¹⁶ Ibid.

¹⁷ Lagos Records 10 confirmed Diphtheria cases in 3 months.
<https://www.vanguardngr.com/2025/03/lagos-records-10-confirmed-diphtheria-cases-in-3-months/>

¹⁸ Weekly diphtheria Situation Report.
<https://ncdc.gov.ng/themes/common/files/sitreps/e148fd703956128bdd24fac04807c2f7.pdf>

¹⁹ Section 20 of the National Health Act, 2014.

²⁰ Prof Cheluchi Onyemelukwe., "IHR Implementation in Nigerian Law., Mapping of Legal Authorities and Analysis of Legislation at Federal Level" available online at

The Quarantine Act (1926) grants the government the authority to impose quarantine measures, movement restrictions, and other containment strategies necessary for disease control. The Nigeria Centre for Disease Control and Prevention (NCDC) Act (2018) further strengthens the country's epidemiological response by empowering the NCDC to coordinate disease surveillance, outbreak response, and risk communication efforts.²¹ Vaccination, as a key pillar of disease prevention, is reinforced by the National Health Policy (2016) and the National Immunization Policy (2021), which mandate the forecasting, procurement, and distribution of vaccines through the National Primary Health Care Development Agency (NPHCDA).²²

Additionally, the Child Rights Act (2003) under section 13 guarantees the right of a child to enjoy the best attainable state of physical, mental and spiritual health. The section further obligates every parent, guardian, institution or anybody responsible for caring for a child to endeavour to provide for the child the best attainable state of health. Section 13(4) further upholds the best interest of the child making it compulsory for every parent, guardian having the care and custody of child to ensure that the child is provided with full immunization. Diphtheria is one of the diseases targeted for prevention through immunisation under Section 6 of the National Programme on Immunization Act 1997. Since the Section 13 of the Childs' Rights Act mandates parents to ensure provision of full immunisation for their children and Section 6 of the National Programme on Immunisation Act lists diphtheria as one of the deadly diseases to be prevented by vaccination, it is implied that it is compulsory for a child to be vaccinated against diphtheria.

At the international level, Nigeria is a signatory to the International Health Regulations (IHR) (2005), which came into force on June 15, 2007. As a Member State of the World Health Organization (WHO), Nigeria is obligated to align its domestic legal and administrative frameworks with these regulations. While the Federal Government has legislative authority over key IHR-related areas, such as aviation, pharmaceuticals, and professional healthcare occupations amongst others, the *Mapping of Legal Authorities and Analysis of Legislation at the Federal Level Report*²³ shows that the state governments has jurisdiction over many critical aspects of the International Health Regulations including immunisation.²⁴ In some instances, in order to set standards and encourage uniformity, the Federal Government has passed law on matters that are residual in nature, such as the Child Rights Act, the Public Health Ordinance.²⁵ Implementation in

https://ncdc.gov.ng/themes/common/docs/protocols/116_1580654680.pdf

²¹ Nigeria Centre for Disease Control and Prevention (Establishment) Act 2018

<https://ncdc.gov.ng/themes/common/files/establishment/7853b64cbbd7f484e9435db383f6a2b1.pdf>

²² National Health Act 2014., available online at https://nesgroup.org/download_policy_drafts/Nigeria%20Vaccine%20Policy%20%282021%29_Draft%20I_1661875592.pdf

²³Health Ethics and Law Consulting., "IHR Implementation in Nigeria Law, Mapping of Legal Authorities and Analysis of Legislation the Federal Level" available online at <https://healthlaw.com.ng/wp-content/uploads/2024/03/IHR-Document-Cheluchi.pdf>

²⁴ Some of this includes Health service delivery • Health financing • Antimicrobial resistance • Zoonotic diseases • Food safety • Biosafety and biosecurity • Immunisation • Environment, including sanitation • Public health law— detection, surveillance, reporting, notification, verification, response, coordination and collaboration activities • Laboratory systems

²⁵ Health Ethics and Law Consulting., "IHR Implementation in Nigeria Law, Mapping of Legal Authorities and Analysis of Legislation the Federal Level" available online at <https://healthlaw.com.ng/wp-content/uploads/2024/03/IHR-Document-Cheluchi.pdf>

the state requires state adoption with many states having adopted the Child Right Law modelled on the Federal Child Rights Act, with some modifications in some cases.²⁶

State Public Health Laws also mirrors the Public Health Ordinance which provided a foundation for public health management in Nigeria. Key provisions under the Public Health Laws of states include section 51(e) which requires all Tertiary, Secondary and Primary healthcare facilities in the state to provide routine immunization services, section 52 which requires the private sector to ensure the implementation of the state IDSR in the delivery of immunization services, and disease surveillance, participation in routine immunization services amongst others.²⁷

In 2023, Nigeria undertook its Second Joint External Evaluation of IHR Core Capacities. Nigeria's recent Joint External Evaluation score in the IHR Core area of Legislation²⁸ underscores the urgent need for both federal and state governments to review and update their public health related laws to ensure compliance with IHR standards and strengthen national health security, preparedness, and response mechanisms.

Strengthening Legal Capacity- Key Towards Effective Emergency Preparedness and Response to Diphtheria

Nigeria continues to face significant challenges in fully eradicating diphtheria.²⁹ While notable strides have been taken at the national level,³⁰ it is imperative to extend these advancements to the subnational regions. Strengthening legal capacity at this level ensures a more robust and decentralised response mechanism, enabling prompt actions in remote areas. Presently, only 7 states in Nigeria have conducted legal assessment of their public health related laws in line with the International Health Regulations 2005³¹, with only two states drafting a public health security law.³² The absence of a standardized legal framework across all states has created gaps in the implementation and enforcement of public health measures, leading to inconsistencies in disease control measures. This fragmented legal landscape has resulted in the uneven enforcement of vaccination mandates, weak inter-agency coordination, weak disease surveillance, inadequate funding, and supply chain challenges. A recent report suggests policy to be an effective tool to address emergence of vaccine-preventable disease, noting that robust legal framework can help

²⁶ Health Ethics and Law Consulting., "IHR Implementation in Nigeria Law, Mapping of Legal Authorities and Analysis of Legislation the Federal Level" available online at <https://healthlaw.com.ng/wp-content/uploads/2024/03/IHR-Document-Cheluchi.pdf>

²⁷ Lagos State Public Health Law 2015., available online at <https://lawnigeria.com/2019/10/15/public-health-law-of-lagos-state/>

²⁸Level 2 (limited capacity) in the 2023 JEE https://ncdc.gov.ng/themes/common/files/report_project/5dfdef6fa5927272669c362f2e8915a9.pdf

²⁹ Global Biosecurity., "Re-emergence of diphtheria outbreak in Nigeria: Efforts, Challenges and Recommendations" available online at <https://jglobalbiosecurity.com/index.php/up-j-gb/article/view/236/548>

³⁰ Vaccination Campaigns, launching of the Media Epidemiology, Infodemiology and Social and Behavioural Change/Risk Communication Media fellowship to improve health reporting in the country, Legal mapping and Analysis of Public Health Security Laws at the Federal Level, Joint External Evaluations of IHR Core Capacities, proposed NCDC Amendment Bill, Quarantine Amendment Bill, to amongst other things integrate human right safeguards, Public Health Security Bill amongst others.

³¹ Kano, Jigawa, Enugu, Nasarawa, Ogun, Lagos, Kaduna

³² Kano and Kaduna

address disease surveillance, poor infection prevention and control measures, laboratory surveillance, response systems and provisions for adequate funding for public health measures.³³

Beyond aligning its domestic laws with the requirements of the IHR (2005), Nigeria as a signatory is expected to take practical steps to comply with other IHR requirements, such as immunisation and disease reporting. A key requirement of the IHR is for countries to develop national core public health capacities for detection, assessment, control and reporting of public health events.³⁴ Diphtheria is noted to be grossly under-reported in Nigeria, with very few reports of outbreaks.³⁵

It has been suggested that delayed reporting of the occurrence of the disease at Kings College led to the outbreak of the infectious disease resulting in one fatality, fourteen confirmed cases and thirty-four contacts placed under observation.³⁶ According to the National Technical Guidelines for The Integrated Disease Surveillance and Response (IDSR),³⁷ diphtheria is classified as an immediately notifiable disease to be notified within 24 hours to the appropriate health officers at the local, state and national levels. However, with guidelines not been enforceable, corresponding legal mandates for immediate reporting within this timeframe are absent from various state public health laws, thereby creating a gap in enforcement and compliance. Only few states in Nigeria have incorporated the IDSR into their public health law (e.g Lagos State) within its Public Health Law, 2015. It therefore becomes imperative for state laws to incorporate the provision of IDSR to ensure uniformity³⁸

The WHO emphasizes that robust epidemiological surveillance systems are crucial for the early detection and containment of diphtheria outbreaks. According to WHO, such systems, should be reinforced through multiple mechanisms, including appropriate legislative measures.³⁹

A strengthened legal framework at the state level can address these gaps by institutionalizing emergency preparedness measures, improving enforcement mechanisms, and ensuring sustainable funding for health security. It would also facilitate better collaboration between public health authorities at federal and state levels, enhance diagnostic capacity, and improve vaccine availability. Legal reforms, coupled with increased investment in infrastructure and workforce capacity, are crucial for effective surveillance and emergency response.

³³Health Science Report., Tolupe J., "The re-emergence of diphtheria in Nigeria: Descriptive assessment of the post-COVID-19 crisis management" available online at

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10630748/>

³⁴International Health Regulations (2005)., Selected Provisions

<https://www.ncbi.nlm.nih.gov/books/NBK143718/>.

³⁵ World Health Organisation., "Diphtheria" available online at

<https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON452>

³⁶ Premium Times., "Parents Fume as Diphtheria Ravages Kings College., available online at

<https://www.premiumtimesng.com/news/headlines/779373-parents-fume-as-diphtheria-ravages-kings-college-lagos.html?tztc=1>

³⁷ National Technical Guidelines for The Integrated Disease Surveillance and Response (IDSR)., available online at

https://ncdc.gov.ng/themes/common/docs/protocols/242_1601639437.pdf

³⁸ There is work currently being done by Resolve to Save Lives to ensure that State laws provide a legal foundation for the IDSR.

³⁹ World Health Organisation., "Diphtheria" Nigeria

<https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON452>

Although diphtheria is under the country's routine immunization programme, implementation gaps and systemic challenges limit its effectiveness. WHO recommends that diphtheria vaccines should be taken at three stages of life; between 0 and 6 years, between 11 and 13 and the last doses at adulthood. However, Nigeria's Expanded Programme on Immunization (EPI)⁴⁰ recommends fewer doses than WHO, potentially contributing to outbreaks.⁴¹ The EPI states that every child should receive three doses of DTaP vaccine between 6 weeks and 14 weeks of age.⁴² To prevent further outbreaks or minimise the incidences of outbreaks, it is important to revise the EPI to align with WHO's recommendation. Further, diphtheria's continuous resurgence is associated with low vaccination coverage. The 57% national coverage of the Pentavalent vaccine (Penta 3) administered in routine immunization is said to be low and that creates the risk of further spread of the disease.⁴³ . This creates the necessity for a multisectoral approach to drive vaccination coverage.

Multi-sectoral Collaboration Towards Eradicating Diphtheria

While legal frameworks can outline collaboration mechanisms, their effective implementation remains pivotal in Nigeria's diphtheria response. The Nigeria Centre for Disease Control and Prevention (NCDC), the National Primary Health Care Development Agency (NPHCDA) and State Primary Healthcare Boards/Agencies, subnational MDAs must enhance their coordination to manage outbreaks efficiently. An effective collaboration will enable early detection, timely medical interventions, and widespread vaccine uptake.⁴⁴

Additionally, multi-sectoral collaboration should extend beyond health agencies to include security forces, community leaders, and civil society organizations, mass media. Engaging these stakeholders can help combat misinformation, improve surveillance efforts, drive vaccination and ensure compliance with public health measures. For instance, engaging community leaders and mass media will be crucial to overcoming barriers to childhood immunization.⁴⁵ When parents fully understand the benefits of vaccination, they are more likely to ensure their children receive the necessary immunizations. Strengthening these partnerships will be critical in eradicating diphtheria and reinforcing Nigeria's overall health security framework.

Conclusion

⁴⁰ The EPI was introduced in Nigeria as the National Program on Immunization (NPI) and has evolved significantly over the year

⁴¹ What you need to know about Diphtheria vaccines.

<https://nafdac.gov.ng/what-you-need-to-know-about-diphtheria-vaccines/>

⁴² Ibid.

⁴³ World Health Organisation., Emergency Disease Outbreak News

<https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON4>

⁴⁴ World Health Organisation., Emergency Disease Outbreak News.

<https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON4>

⁴⁵ Afshan Raza., Vaccination gaps and resurgence of diphtheria in Nigeria: An outbreak simmering for a catastrophe" available online at

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10590836/>

The recent diphtheria outbreak in Nigeria has underscored critical gaps in the country's health security framework, particularly in vaccination coverage, **reporting**, disease surveillance, and legal preparedness. Several key lessons have emerged from this public health crisis.

First, low vaccination rates remain a major driver of diphtheria outbreaks, highlighting the urgent need for improved immunization strategies. Multisectoral collaboration, as highlighted, in this article is crucial in ensuring an increase in vaccination update. This Multisectoral collaboration should extend beyond health agencies to include security forces, community leaders, and civil society organizations, mass media. Additionally, it is recommended that mobile vaccination teams be deployed to rural areas and the conflict zones in the North East of Nigeria.

Secondly, the lack of a standardized legal framework has been identified as a significant impediment to the uniform enforcement of public health measures across Nigeria. To bridge this gap, it is imperative for all Nigerian states to conduct a comprehensive assessment of their public health laws and other relevant laws. Such an exercise would enable states to identify gaps, inconsistencies, and outdated provisions that undermine their ability to respond to public health threats effectively. Following this assessment, states should prioritize the development of a robust public health security law that aligns with the International Health Regulations. By doing so, Nigeria can foster a more cohesive and coordinated public health system, enhancing disease surveillance, outbreak response, and emergency preparedness at both state and national levels.

Third, early detection and rapid response are fundamental to controlling infectious diseases. The delayed reporting of cases highlights a significant gap in epidemiological surveillance, which weakens public health interventions. Given that the Integrated Disease Surveillance and Response (IDSR) system mandates the notification of diphtheria cases within 24 hours to the appropriate health authorities, it is imperative for states to reinforce this requirement through legally binding provisions. Establishing clear legal mandates within state public health laws will enhance compliance, ensure prompt case reporting, and ultimately improve disease containment efforts.

Lastly, implementation gaps and systemic challenges continue to hinder the effective scale-up of diphtheria vaccination in Nigeria. Notably, the Nigeria Expanded Programme on Immunization (EPI) recommends fewer doses of diphtheria vaccination than the World Health Organization (WHO) recommended doses, a factor that may contribute to recurring outbreaks. To enhance population immunity and prevent future outbreaks, it is essential to revise the EPI to align with WHO's recommended dosage schedule. This adjustment will strengthen disease prevention efforts, improve vaccine effectiveness, and reduce the risk of diphtheria transmission.

By addressing these challenges through stronger legal and policy frameworks, improved surveillance, and increased vaccination coverage, Nigeria can significantly reduce the burden of diphtheria and reinforce its overall health security infrastructure.