NATIONAL GUIDELINES FOR FOOD HANDLERS' MEDICAL TEST

2024

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National Guidelines for Food Handlers' Medical Test 2024

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ACRONYMS

EMR	Electronic Medical Records
EHOs	Environmental Health Officers
FAO	Food and Agriculture Organization of Nigeria
FBDs	Foodborne Diseases
FBOs	Food Business Owners
FCT	Federal Capital Territory
FMHSW	Federal Ministry of Health and Social Welfare
HF	Healthcare Facility
NIN	National Identity Number
NPFSQIP	National Policy on Food Safety and Quality and Its Implementation Plan
PPE	Personal Protective Equipment
QR codes	Quick Response Codes
SMoHs	State Ministries of Health
SOP	Standard Operating Procedure
WHO	World Health Organization

FOREWORD

Food safety is a cornerstone of public health and well-being, integral to the prosperity and health of our society. Each year, unsafe food causes approximately 600 million cases of foodborne diseases and 420,000 deaths worldwide. Alarmingly, 30% of these deaths occur among children under 5 years of age. Unsafe food also results in the loss of 33 million healthy life years annually, highlighting the profound impact on global health[1].

In Nigeria, foodborne diseases continue to be a significant public health challenge, with a substantial proportion of these illnesses linked to improper food-handling practices[2]. Ensuring that food handlers are healthy and adhere to stringent safety protocols is crucial in mitigating these risks. Studies have shown that addressing the health and hygiene of food handlers can significantly reduce the incidence of foodborne diseases.

With this understanding, I am proud to present the National Guideline for Food Handlers' Medical Tests for the medical assessment and management of food handlers. This document is the result of extensive collaboration among stakeholders and aims to ensure that food handlers are healthy and free from diseases that could be transmitted through food.

The implementation of these guidelines is expected to significantly reduce the burden of foodborne diseases caused by poor food handlers' medical fitness. This initiative represents a low-hanging fruit that will eliminate a number of preventable cross-contaminations from food handlers, thereby safeguarding public health.

The successful implementation of this guideline will depend on the sustained commitment of resources—both human and material—at various levels of governance to ensure strict enforcement of its provisions. Legal provisions will also be required by all enforcement bodies to entrench the guidelines and impose punitive measures for non-compliance.

As we look to the future, it is essential to anticipate and address emerging challenges in food safety. This guideline is not just a regulatory framework but a dynamic tool that should evolve with advancements in medical science and food safety practices. Continuous monitoring, evaluation, and updating of these guidelines will be crucial in responding to new threats and ensuring that our food safety standards remain robust.

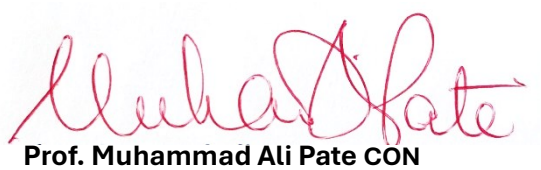
I therefore call upon all Nigerians, public and private sectors, civil society, development partners, and other stakeholders to support the implementation of this guideline. It is imperative to align all and interventions with this document for a unified approach to managing foodborne diseases in Nigeria. Our collective efforts will be vital in building a resilient food safety system that protects consumers and enhances public health.

As we embark on this journey, I urge all stakeholders to maintain unwavering commitment and active engagement in the implementation and continuous enhancement of these guidelines. Our

[1] WHO (2024) Estimating the burden of foodborne diseases. Assessed online on the 30th of November 2024. https://www.who.int/activities/estimating-the-burden-of-foodborne-diseases?form=MG0AV3

[2] Uzomah J. O. et al., (2023) Factors associated with food safety practices among food handlers in Abuja municipal area council, Nigeria. J Glob Health Sci. 2023 Jun;5(1):e9. https://doi.org/10.35500/jghs.2023.5.e9

collective efforts will pave the way for significant strides in reducing foodborne diseases and safeguarding public health in Nigeria. Let us work together to ensure that our food safety standards remain exemplary, protecting the well-being of our citizens and fostering trust in our food systems.



Prof. Muhammad Ali Pate CON
Coordinating Minister
Federal Ministry of Health and Social Welfare
December 2024

PREFACE

In today's information age, we are constantly bombarded with unverified details about the food we consume and the associated health risks, through the internet, TV, and newspapers. To address these concerns, these guidelines have been meticulously developed to enhance the safety and wholesomeness of our food. They aim to ensure that individuals involved in food handling are healthy and pose no risk of transmitting diseases through the food they prepare.

The guidelines encompass a comprehensive framework that starts with an introduction that provides the necessary context and legislative foundation upon which they are built. The food handlers' medical assessment section emphasizes the importance of regular medical tests, the specific categories of food handlers covered, and the types of food establishments affected. Detailed procedures for conducting these assessments are also outlined, ensuring a standardized approach to safeguarding food safety.

A significant portion of the guidelines is dedicated to managing illnesses and infections among food handlers. This section outlines protocols for handling communicable diseases, vaccination requirements, and return-to-work criteria, all aimed at minimising any potential risks to consumers. Procedures for reporting test results and maintaining documentation are also covered, highlighting the importance of transparency and record-keeping in maintaining food safety standards.

The roles and responsibilities of various stakeholders, including food business owners and government authorities, are clearly defined to ensure a collaborative effort in upholding health standards and hygiene practices. This section underscores the collective responsibility to ensure that food handlers are fit to work and that the food supply chain remains safe.

The appendices provide valuable resources, including definitions of key terms and a flowchart that visually represents the medical examination process for food handlers. These additional resources are designed to facilitate the implementation and understanding of the guidelines.

We hope that these guidelines will serve as a critical tool in promoting food safety and protecting public health. By adhering to these protocols, food business operators can significantly reduce the risk of foodborne illnesses and contribute to the overall safety and confidence of consumers in our food systems while helping regulators at all levels monitor compliance with best practices.



Daju Kachollom S. mni
Permanent Secretary
Federal Ministry of Health and Social Welfare
December 2024

ACKNOWLEDGMENT

The development of the National Guideline for Food Handlers' Medical Test has been a truly inclusive and participatory endeavour, with contributions from over 40 major stakeholders across national and sub-national government MDAs, academia, industry, professional bodies, international development partners, and public health experts.

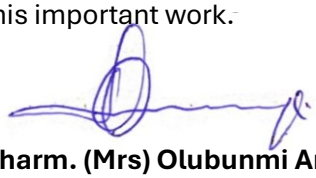
On behalf of the Federal Government of Nigeria, the Federal Ministry of Health and Social Welfare extends its heartfelt gratitude to all the stakeholders for their relentless efforts and invaluable contributions, driven by a wealth of knowledge and experience. You have all been pivotal in the development of this guideline.

We extend special thanks to the project technical support team, including Dr. John Aigbonohan, Dr. Seun Egbewunmi, and Mr. Obinna Chukwudebe. Their expertise and dedication have been instrumental in shaping this document, ensuring it meets the highest standards of excellence.

Our profound gratitude also goes to our partners: the World Health Organization (WHO), SANOFI, and Medbury Medicals. Their immense financial and technical support, as well as their collaboration throughout this process, have been critical to the success of the development of these guidelines.

These guidelines have significantly benefited from the outstanding leadership of the National Coordinator, Food Safety & Quality Programme, Mr. Atanda O. John, the project lead, Mr. Oluwafemi Stephen, and the exceptional Food Safety and Quality Programme team as well as the staff of the Food and Drug Services Department. Their coordination in the formation, development, and finalisation of this document has been exemplary.

We are deeply grateful to all who have contributed technically and financially to the success of this important work.



Pharm. (Mrs) Olubunmi Aribeana,
Director, Food and Drug Service Department
Federal Ministry of Health and Social Welfare
December 2024

SECTION 1: INTRODUCTION AND BACKGROUND

1.1 BACKGROUND

Ensuring the safety of food is a fundamental public health priority. Food handlers, encompassing individuals who directly handle or come into contact with food items meant for public consumption —such as cooks, chefs, servers, vendors, transporters and processing personnel— represent a critical control point in the prevention of foodborne illnesses. In Nigeria, the high burden of foodborne diseases is highlighted by the numerous outbreaks linked to contaminated food across various states. This situation underscores the critical need for stringent food safety regulations and the establishment of rigorous health standards for food handlers.

The National Policy on Food Safety and Quality and its Implementation Plan (NPFSQIP), 2023 in its bid to minimise the incidence of food safety risks associated with Human, Animal, Plant and Environment has identified the need for national guidelines for food handlers' medical tests to be adopted and implemented in all the states of the federation and the FCT.

Foodborne diseases (FBDs) are one of the most frequent public health problems in daily life. The hazards that cause FBD may occur in the different stages of the food chain (from primary production to the table). FBDs are caused by a wide array of pathogens, including bacteria like *staphylococcus aureus, Escherichia coli* O157*, Vibrio cholera*, and viruses such as Hepatitis A and E. These pathogens can lead to severe health outcomes ranging from acute gastroenteritis to more chronic conditions, and in some cases, can be fatal.

Independently from its origin, once the food reaches the consumer it may have an impact on public health and cause severe economic damage to the establishments devoted to its preparation and sale. These two events may cause a loss of confidence and the closing down of such businesses.

These guidelines are designed to address this public health challenge by stipulating that all individuals involved in public food handling should undergo required medical examinations to screen for potential carriers of infectious diseases. These examinations are crucial not only for the early detection and treatment of infections but will help to reduce contamination and transmission of disease and act as a strong preventive tool for Public Health workers in reducing episodes of foodborne diseases. The medical tests required under these guidelines include, but are not limited to stool analysis, urine and blood tests. By implementing these guidelines as a standard practice in all the states of the federation and the FCT, Nigeria aims to significantly address the burden of FBDs, especially the prioritised foodborne diseases in the country.

1.2 SITUATIONAL ANALYSIS

The role of food handlers in the transmission of foodborne diseases cannot be overstated. In Nigeria, where informal food markets are prevalent, the potential for food handlers to act as vehicles for pathogens is particularly high. The lack of standardised training and education on food safety and hygiene practices among these handlers exacerbates the risk. Many handlers may not be aware of the critical control points in food preparation that can prevent contamination, such as proper handwashing, using appropriate PPEs, avoiding cross-

contamination, and cooking foods to safe temperatures, use of safe and potable water, wholesome raw materials and clean utensils.

To bridge this knowledge gap, it is imperative that food handlers receive comprehensive training and regular health screenings/vaccinations as mandated by these guidelines as well as identify carriers of infectious diseases among food handlers, who can then take necessary precautions and receive appropriate treatment to prevent disease transmission.

The implementation of these medical tests is a proactive measure that not only protects consumers but also empowers food handlers with the knowledge and health assurance needed to perform their roles safely. By prioritizing the health of food handlers through these guidelines, Nigeria can significantly reduce the incidence of diseases caused by biological contaminants. This approach will contribute to a safer food supply chain and promote public health.

1.3 LEGISLATIVE FRAMEWORK

Nigeria currently operates a multi-agency food safety control system which is mostly sectorial. According to the regulatory framework embedded in the National Policy on Food Safety and Quality and Its Implementation Plan, 2023 the five key sectors with mandates on food safety and quality in Nigeria are the Health, Agriculture, Trade, Environment and Science and Technology. These mandates also stretch beyond the National to the sub-national governments.

However, the Federal Ministry of Health and Social Welfare (FMHSW), under the Public Health Services Act 1958 (Cap 165), has a strong legal mandate to uphold food safety in Nigeria.

1.4 GOALS, OBJECTIVES AND SCOPE

1.4.1 Goals

Ensuring the safety and wholesomeness of food for all consumers by preventing the transmission of foodborne diseases through food handlers.

1.4.2 Objectives

1. To establish a set of standards for the medical examination of food handlers.
2. To identify and manage health risks posed by food handlers to prevent the spread of infectious diseases.
3. To ensure food handlers suffering from foodborne illness shall not be allowed to handle food or be assigned duties in areas of processing where they are likely to contaminate the food.
4. To enhance food handlers' knowledge and practices regarding hygiene and food safety.
5. To provide basic information on the recommended vaccinations for food handlers.

1.4.3 Scope

1. These guidelines apply to all individuals involved in food handling processes along the food supply chain.
2. It covers a range of medical tests that food handlers must undergo at specified intervals.
3. It outlines the appropriate medical interventions for food handlers to undergo to prevent transmission.

4. It gives procedures for health authorities to follow in certifying food handlers fit for work.
5. It includes educational components to improve food handlers' understanding of pathogens and safe food handling practices.

SECTION 2: GUIDELINES FOR FOOD HANDLERS' MEDICAL ASSESSMENT

2.1 INTRODUCTION

The primary purpose of these guidelines are to establish a standardized framework for the health assessment of individuals who handle food in various capacities. It is expected to support the implementation of the National Policy on Food Safety and Quality and Its Implementation Plan (NPFSQIP) by systematically evaluating the health status of individuals in the food service industry, we aim to safeguard public health by significantly reducing the occurrence of food safety incidents and upholding stringent food safety standards.

Adherence to these guidelines is vital for ensuring the highest levels of food safety and public health protection. By following these standardised procedures, we can collectively ensure that our national food supply remains safe, wholesome, and of the highest quality for all consumers.

2.2 IMPORTANCE OF FOOD HANDLERS' MEDICAL TESTS FOR FOOD SAFETY

Medical assessment for food handlers is a critical component of food safety management. They help to identify and mitigate the risk of foodborne illnesses by ensuring that individuals involved in the preparation, handling, and serving of food are free from diseases that can be transmitted through food. These assessments screen for conditions like typhoid, hepatitis A, gastrointestinal and other infections, which can severely impact public health if passed on to consumers. By validating the health status of food handlers, medical tests protect consumer health, uphold the reputation of food service establishments, and contribute to the overall integrity of the food supply chain. Regular medical examinations and certification also serve as a proactive approach to prevent potential outbreaks and maintain high standards of hygiene and safety in the food industry.

2.3 SCOPE OF APPLICATION

The scope of application of these guidelines will be based on the specific categories of food handlers and the types of establishments enumerated below.

2.3.1 Categories of food handlers covered

The following categories of food handlers are by these guidelines mandated to undergo medical tests before handling food.

1. **Kitchen Staff:** Chefs, cooks, and kitchen assistants.
2. **Food Preparers:** Individuals who handle raw ingredients and prepare dishes.
3. **Serving and Catering Staff:** Waiters, waitresses, and buffet attendants at events or functions.
4. **Food Packers:** Those who package food for distribution or sale.
5. **Bakery Workers:** Individuals involved in the preparation and handling of bakery products.
6. **Food Processing Operators:** Workers in facilities that process and package food products including maintenance operators and sanitary personnel.

7. **Bartenders:** Those who prepare and serve drinks, including those handling garnishes.
8. **Dishwashers:** Staff responsible for cleaning dishes and utensils that come into contact with food.
9. **Food Delivery Personnel:** Individuals who deliver food to customers.
10. **Food Stall and Street Food Vendors:** Those who operate food stalls or mobile food service.
11. **Food Storage Handlers:** Staff responsible for managing the storage conditions of food items.
12. **Concession Stand Workers:** Individuals working at food stands in schools, theatres, stadiums, amusement parks etc.
13. **Airline catering vendors:** Those who provide meals for passengers during flights.
14. **Train catering vendors:** Those who serve meals to train passengers.
15. **Cruise ship/Sea vessel catering vendors:** Those who handle diverse food options on cruise ships.
16. **Livestock farmers**: These would include butchers, meat cutters, and those who indirectly impact food safety by raising animals.
17. **Emergency Situation Workers**: This includes individuals who are involved in food handling and preparation during emergencies or disasters that disrupt normal food service operations and supply chains.

2.3.2 Categories of food establishments affected

The following types of food establishments will be subjected to the provisions of these guidelines.

1. **Restaurants and Cafes:** Including fine dining, casual, and fast-food outlets**.**
2. **Bakeries and Pastry Shops:** Where bread, cakes, and other baked goods are made and sold.
3. **Abbatoirs, Slaughter Slabs, and Butcher Shops:** Specializing in meat products.
4. **Grocery Stores and Supermarkets:** Especially those with deli, bakery, or seafood sections.
5. **Food Trucks and Street Vendors:** Mobile units serving food to the public.
6. **Catering Services:** Providing food for events, functions, or institutions.
7. **School Cafeterias:** Serving students and staff.
8. **Hospital Kitchens:** Preparing meals for patients, visitors, and healthcare workers**.**
9. **Bars and Pubs:** Where snacks or meals are served alongside beverages.
10. **Food Processing Plants:** Where food is prepared, canned, or packaged**.**
11. **Hotels and Resorts:** With in-house dining services**.**
12. **Corporate Dining Facilities:** Serving employees within a business or organization**.**
13. **Food Markets and Stalls:** Including speciality food stalls
14. **Airports and Train Stations:** Hosting various food service outlets for travelers.
15. **Farms and livestock feed processing plants:** Where animals for food are slaughtered, cut and processed for sale.
16. **Daycare Centres:** Serving of children and infants.

2.4 FOOD HANDLERS' ASSESSMENT IMPLEMENTATION STRUCTURE

1. There shall be pre-qualification for medical facilities that are eligible to carry out the food handlers assessments, using uniform pre-qualification criteria for all the centres. These medical facilities shall include both public and private institutions.
2. The pre-qualified medical facilities shall be mapped to their respective states whereby only the food handlers' assessment reports from the pre-qualified medical facilities shall be acceptable in the state. Also, all food handlers shall only access the approved medical facilities in their respective States and FCT for the assessment.
3. The pre-qualification and monitoring of the approved medical facilities shall be carried out, only, by the relevant departments in the State Ministries of Health.
4. There shall be re-accreditation of the pre-qualified medical facilities every year.
5. The prices of the Food handlers' medical assessments shall be standardised per state for all the approved medical facilities.

2.5 MEDICAL TESTS AND PROCEDURES

2.5.1 Procedures

Please refer to Appendix 3 for the medical examination process flowchart.

1. **Declaration Form Completion**: Food handlers must complete and certify the declaration form, disclosing any recent illnesses that pose a risk to food safety, such as typhoid, cholera, hepatitis A, dysentery, gastrointestinal infections, skin infections, etc.
2. **Validation by Medical Doctor**: The medical doctor shall validate the completed declaration questionnaire (see Appendix 2).
3. **Thorough Physical Examination Indicators**: Food handlers assessment should be conducted every six (6) months. Where any of the following history, signs, and symptoms occur, there should be a more thorough examination:
    i. Fever
    ii. Jaundice
    iii. Skin infections on hands, arms, or face
    iv. Boils, styes, or sepsis on fingers
    v. Discharge from eyes, nose, ears, or mouth
    vi. Diarrhea and/or vomiting
    vii. Known history of being a typhoid carrier
    viii. Sore throat
    ix. Cough or flu
4. **Typhoid Vaccination Certificate**: Food handlers must present their anti-typhoid vaccination certificate to the medical doctor. It should be valid (3 years from the last vaccination date) and certified by a registered medical doctor. If the certificate is invalid or absent, the medical doctor shall prescribe the typhoid vaccine.
5. **Hepatitis A Vaccination Certificate**: The Food handlers shall also present a valid Hepatitis A certificate to the medical doctor during the Food handers assessment exercise. If the Hepatitis A vaccination has not been received by the Food handler, a medical doctor shall prescribe the Hepatitis A vaccine.

6. **Laboratory Investigations:** The following recommended laboratory investigations shall be carried out for all food handlers during their assessment:
    i. Stool microscopy, culture and sensitivity
    ii. Hepatitis A Antigen
7. **Additional Laboratory Tests**: If clinically indicated, further laboratory tests may be requested by the medical doctor. If foodborne diseases are suspected, specific laboratory tests should be considered.
8. **Certification of Fitness**: Food handlers can be certified as fit if all findings are normal or present no risk to food safety.
9. **Re-examination Triggers:** A certified food handler shall undergo re-examination if any of these conditions arise:
    i. Jaundice
    ii. Diarrhea
    iii. Vomiting
    iv. Fever
    v. Sore throat with fever
    vi. Visibly infected skin lesions (boils, cuts, etc.)
    vii. Discharges from the ear, eye, or nose.
    viii. Cough or Flu.
10. **Illness Reporting:** Any illness among food handlers must be reported to management of the Food handler's organization or association. The management or association must ensure that those suffering from any mentioned conditions are excluded from handling food and re-examined by a registered medical doctor.
11. **Record Keeping:** The completed and certified medical examination ccertificate shall be kept by the food handler, with a copy retained by management. The validity of the medical examination is not affected by resignation, change of employer, or redeployment to a new location by the same employer until it expires (valid for one year; typhoid vaccination is valid for three years).
12. **Medical Records:** Medical doctors shall record the examination in the patient's medical records. The registration number should be recorded on the medical examination form as it will serve as a reference.
13. **Issuance of Certificates:** A Certificate of Fitness is generated for all fit subjects while a Report is generated for subjects temporarily unfit to work and those who are cleared for food handling duties.
14. **Validation and Verification of the Food Handlers Certificates**: The generated fitness-to-work certificates for the Food Handlers assessment shall contain QR codes that can be used for verification by any independent body or organisation to prove the genuineness and validity of the certificates. All certificates must have unique identifiers (Full name, Date of Birth, Gender, Passport Picture and National Identity Number) which shall be used to identify the original holder of the certificate during verification. These certificates should be stored in formats that are verifiable in a central database administered by the regulatory bodies.

SECTION 3: GUIDELINES FOR FOOD HANDLERS' MEDICAL MANAGEMENT

3.1 INTRODUCTION

The purpose of these guidelines for medical management for food handlers is to establish a standardized approach to ensure that individuals involved in food processing and service are medically fit and do not pose a risk of transmitting foodborne illnesses to their customers. These guidelines serve to protect public health by preventing the spread of diseases such as typhoid, hepatitis A, gastrointestinal and other infections from food handlers to consumers. They also provide a clear protocol for medical practitioners to follow in administering approved interventions such as vaccinations, and in issuing fitness certificates, thereby ensuring consistency and reliability in the health assessment of food handlers.

3.2 MANAGEMENT OF ILLNESSES AND INFECTIONS

3.2.1 Protocols for handling food handlers with communicable diseases

Food handlers assessment should be conducted every 6 months. During the assessment by a registered medical doctor, a certified food handler should undergo thorough re-examination if these conditions arise:

1. Jaundice
2. Diarrhoea
3. Vomiting
4. Fever
5. Sore throat with fever
6. Visibly infected skin lesions (boils, cuts, etc)
7. Discharges from the ear, eye or nose.
8. Cough or Flu

The management should ensure that those who suffer from any of the above conditions are excluded from handling food and re-examined by a registered medical doctor. A medical practitioner shall vaccinate the food handlers with the Typhoid and Hepatitis A vaccine if the vaccination certificates are absent or are no longer valid or the food handlers do not have any vaccination. Typhoid and Hepatitis A vaccinations should also be administered by the medical practitioner as prescribed by the manufacturer and/or competent authority.

3.2.2 When Exclusion May Not Be Needed

There are non-Infective causes of symptoms such as diarrhoea and vomiting where exclusion is not necessary especially when there's evidence of a non-infective cause. Examples include morning sickness during pregnancy, certain medications, bowel inflammation (diverticulitis, ulcerative colitis, Crohn's disease), irritable bowel syndrome, bowel cancer, malabsorption syndromes (e.g., coeliac disease, cystic fibrosis), and dietary indiscretion (e.g., excessive alcohol or spicy food).

While respiratory infections rarely cause food contamination, bacteria like *Staphylococcus aureus* in nasal passages or throat can contaminate food if coughed or sneezed upon. Food handlers with persistent coughs or sneezing should avoid handling open food.

Workers with Hepatitis B, Hepatitis C, or HIV are safe for food handling if otherwise healthy.

Food handlers with household members experiencing diarrhoea and vomiting don't always need exclusion. Stringent hygiene practices are recommended. Food handlers who have household members who are suffering from specific infections like enteric fever, *E. coli* O157, and Norovirus should be excluded from food handling while being investigated for the presence of pathogens or diseases.

3.2.3 Protocols for Vaccine Administration

Two major vaccine-preventable diseases are Typhoid Fever and Hepatitis A.

1 **Typhoid Vaccines**

There are two internationally licensed vaccines against typhoid. A Vi capsular polysaccharide vaccine which contains extracted cell surface Vi polysaccharide of *Salmonella enterica* serovar Typhi, S typhi Ty2 strain in a Guidelines for Typhoid Vaccination sterile solution. It is an injectable vaccine, recommended for intramuscular use. It is produced by several internationally recognized vaccine manufacturers and is easily available globally.

The other vaccine is the Ty21a live attenuated, formulated as a capsule for oral administration. Protection from the Ty21a vaccine is based on different surface antigens, including O- and H-antigens; it lacks Vi-antigen and protection is therefore independent of Vi-expression by the bacteria. In the past a liquid formulation of the same was also available, but not available now. The capsule is recommended for children aged ≥ 5 years of age, but the liquid formulation can be administered even to younger children (aged ≥ 2 years).

After scrutinizing local and international data, the Epidemiology Unit suggests administering the vaccine only to high-risk groups such as food handlers and persons who do not use or do not have proper toilet facilities. Revaccination should take place three (3) years after the first vaccination.

2 **Hepatitis A Vaccines**

Humans are the only host for Hepatitis A virus infection and, as a result, global eradication of the virus is possible. The likelihood of eradication was greatly increased with the advent of Hepatitis A vaccines.

The two hepatitis A-only vaccines are similar in that both require two doses, contain inactivated whole virus, and are highly immunogenic, resulting in nearly 100% seroconversion. In addition, long-term persistence of anti-HAV antibodies has been demonstrated, regardless of which vaccine is used. The Hepatitis A vaccines also have a remarkable safety profile.

Vaccination is the most effective way to reduce the incidence of hepatitis A.

3 Other vaccines as may be required.

3.2.4 Period/interval for vaccination

1. Typhoid vaccination: One dose every three years

2. Hepatitis A vaccination: Two doses at 0 and 6months intervals for full protection

3.2.5 Return-to-work criteria after illness

In most cases of infection, bacteria and viruses can still be present in someone's faeces even after symptoms have stopped. Therefore, managers must continue excluding food handlers for a period of time after symptoms resolve. The recommended exclusion period is 48 hours, counted from the time when symptoms (especially diarrhoea) naturally cease or from the end of any symptom treatment (e.g., anti-diarrheal medication). For instance, if symptoms end at 5 pm on Monday, the person can safely resume work from 5 pm on Wednesday. If unsure about symptom resolution, count from the time of the first normal stool. Specific infections may require different actions, as outlined below.

1 ***Vibrio cholerae***
In addition to the normal 48-hour exclusion, people handling and serving open ready-to-eat foods should seek medical clearance before returning to work. This usually involves two consecutive negative stool samples taken at intervals of at least 24 hours before the resumption of food handling duties.

2 ***Shigella dysenteriae, flexneri*, and *boydii*.**
Similar to the standard 48-hour exclusion, food handlers serving open ready-to-eat foods should seek medical clearance before returning to work. This usually requires two consecutive negative stool samples taken at intervals of at least 48 hours before the resumption of food handling duties. Household contacts of infected individuals should inform their manager and follow the same clearance process.

3 **Hepatitis A**.
Hepatitis A is most infectious before symptoms appear and remains infectious during the first week of illness. Food handlers with hepatitis A should remain off work for seven days after the onset of jaundice (yellowish skin and eyes) or other symptoms. Any food handler developing unexplained jaundice should be immediately excluded and seek medical advice before returning to work. Household contacts of infected individuals need not be excluded if they follow good hygiene practices.

4 **Infected or injured skin**
Damaged skin or sores (e.g., boils, septic cuts) can become infected with bacteria like *Staphylococcus aureus*, causing food poisoning. Food handlers can usually continue working if the infected area is completely covered (e.g., with a waterproof dressing of distinctive colour). If an infected lesion cannot be effectively covered, the person should be excluded from food-handling tasks likely to contaminate food.

5 ***Entamoeba histolytica* (Amoebic dysentery)**
In addition to the standard 48-hour exclusion, food handlers handling open ready-to-eat foods should seek medical clearance before returning to work. This typically involves a single negative stool sample taken at least a week after treatment ends before the resumption of food handling duties.

6 **Worms – *Taenia solium***
Exclude food handlers from direct handling and serving of open ready-to-eat foods until two negative stool tests at 1 and 2 weeks post-treatment. If the manager lacks confidence in the

personal hygiene practice of the affected staff, s/he should be excluded from all food handling duties and areas.

7 **Lassa Fever.**

Similar to the standard 48-hour exclusion, food handlers serving open ready-to-eat foods should get proper documentation of the illness, medical clearance, and approval from health authorities. This documentation should be maintained by the employer

Overall, if the cause of illness has been confirmed as noninfective after exclusion, the food handler can return to work. A single bout of loose stool or vomiting, without accompanying fever, is likely non-infectious if 24 hours have passed without further symptoms. In such cases, if no other evidence suggests an infectious cause, the person poses a very low risk and can resume work before the standard 48-hour limit. Upon return, extra care should be taken with personal hygiene practices, especially hand washing. Consider a different approach if the work involves vulnerable consumers (e.g., those who are ill or young children). While small numbers of bacteria and viruses may persist in faeces after recovery, proper hygiene practices mitigate any risk in a food business setting.

3.3 PROCEDURES FOR REPORTING TEST RESULTS

The figure below is a flow chart for medical testing.

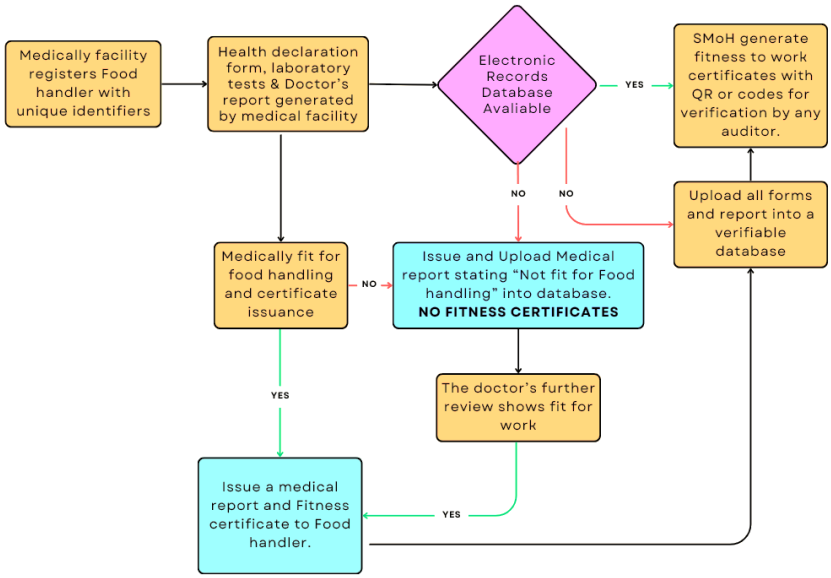


Figure 1: Procedures for reporting test results.

3.4 DOCUMENTATION

3.4.1 Record-keeping requirements

The record-keeping and document requirements that the medical facility must meet to be eligible for enrolment :

1. Possession of written reporting and documentation policy and procedure.
2. Possession of computers and computer operators in the Medical records unit.
3. Possession of a pre-defined format for food handlers' Health Declaration Form, and laboratory and radiology investigation request forms.

4. Possession of patient files which can be used in documenting Doctor notes.
5. Possession of the food handlers certificate in the required formats which contain QR codes which are verifiable by an independent body.
6. Possession of internet access at the Medical records facility.
7. Possession of trained staff at the medical records, clinical team, and non-clinical team on record keeping and documentation.

3.4.2 Policy for medical facility reports and documentation handling

1. The medical facility shall manage patients' medical records with standardised documentation and in accordance with the stipulated quality of patient care and report preservation as provided in the Standard Operating Procedure (SOP) in all approved medical facilities.
2. The medical facility shall maintain a unified and consistent medical record for all stages of the food handlers assessment exercise for all food handlers attended to at their facility.
3. Each medical record shall have unified identifiers that will link the patient with the record.
4. The medical facility staff shall maintain confidentiality, ensure safe storage, and identify the retention time and means of destruction of patients' records.
5. The medical facility shall ensure that the content, format, and location of entries for a patient's clinical record are standardized to help promote the integration and continuity of care among the various practitioners of care to the same patient.
6. The patient's medical record (hard or soft copy) shall include sufficient information to support the diagnosis, justify the treatment provided, document the course and results of the treatment, and facilitate the continuity of care among healthcare practitioners.
7. The medical facility shall ensure that patients' records are carefully managed to avoid loss, that confidentiality is maintained, and that local and company laws are upheld.

3.4.3 Purpose of Documentation

1. To delineate the process of initiating, maintaining and using the patient's medical record to serve as a historical document reflecting the patient care services.
2. To serve as a reference for all services provided to the patient at the hospital over time.
3. To be used as a reference in the medico-legal or litigation process and for financial issues.
4. To provide data and information for audit purposes and data analysis.
5. To guide staff in the management of patient health records and the maintenance of adequate confidentiality and safety of records.

3.4.4 Content of the Medical Record

The patient's medical record may be created using hard or copy forms as well as Electronic Medical Records. Before making any entry, all forms of the paper medical record are to be headed with a patient ID label; which includes the following information about the patient:

1. Patient name
2. Medical record number
3. Date of birth
4. Case number (unique number for each visit)
5. National Identitiy Number (NIN)

6. Gender
7. Passport Photograph

All other content shall be as prescribed by the National Health Act 2014 and other extant laws and regulations in each respective State and FCT including, but not limited to:

1. Language of medical records.
2. Electronic medical records (EMR).
3. Closure of Medical Records.
4. Retention Time.
5. Release of Medical Records.
6. Request for Healthcare Records by Healthcare Workers or Units.
7. Request for research purposes.
8. Destruction of Medical Records.
9. Medical Record Loss /Damage.
10. Training.

SECTION 4: ROLES AND RESPONSIBILITY

4.1 OBLIGATIONS OF FOOD BUSINESS OWNERS (FBO)

In accordance with the National Policy on Food Safety and Quality and Its Implementation Plan, 2023, food business owners are mandated to adhere to the following best practices to ensure Good Hygiene among food handlers:

1. Food business owners are required to inform all food handlers of their health and hygiene obligations.
2. They must take all reasonable measures to prevent food contamination by ensuring individuals on the premises avoid unnecessary contact with ready-to-eat food, and refrain from spitting, smoking, or using tobacco where food is exposed or in proximity to food contact surfaces.
3. Information provided by food handlers concerning their health must be used solely for mitigating risks of food contamination.
4. Owners are responsible for maintaining up-to-date vaccinations for all food handlers in their employment, with documented evidence of such vaccinations.
5. Confidentiality regarding a food handler's health status must be preserved, with disclosure permitted only to the proprietor or an authorized officer, and only with the consent of the food handler.
6. Ensure that food handlers who have recovered from gastrointestinal infections are re-educated on the importance of hand hygiene before resuming their duties.
7. Ensure that they report foodborne illness as required of them by law and statutory obligations.

4.2 HEALTH STANDARDS OF FOOD HANDLERS

1. Food businesses must ensure that any individual exhibiting or suspected of exhibiting symptoms of foodborne diseases as stated in 3.2.1 is prohibited from engaging in food handling activities.
2. If an individual is suspected of having a condition that could lead to food contamination (e.g., skin lesion), they must take all reasonable measures to prevent such contamination while continuing their duties.
3. Individuals previously suffering from or suspected of having symptoms of a foodborne illness may only resume handling food upon clearance from a medical practitioner confirming they are no longer afflicted or contagious.

4.3 HYGIENE PRACTICES FOR FOOD HANDLERS

Food businesses are obligated to:

1. Provide easily accessible and clean hand washing facilities dedicated only to food handlers.
2. Ensure these facilities are supplied with warm running water and soap.
3. Guarantee that hand washing facilities are designated solely for the purpose of washing hands, arms, and face.

4. Offer single-use towels at each facility, along with a receptacle for disposal.

Food handlers are obligated to:

1. Wash hands thoroughly before commencing work, prior to handling food, and before donning gloves.
2. Utilize provided hand washing facilities after engaging in activities that could lead to contamination, ensuring hands are dried using disposable paper towels or hand dryers.
3. Inform their supervisor about any infections or conditions that may result in discharges from the ears, nose or eyes that may make food unsafe or unsuitable.
4. Cover any infected sore completely using a waterproof bandage and/or clothing.
5. Take proactive steps to minimize contact with ready-to-eat foods.
6. Maintain personal grooming standards by restraining hair and securing loose items such as hair clips, buttons, jewellery, and bandages under waterproof coverings.
7. Comply with necessary vaccinations as part of their certification process.
8. Use appropriate Personal Protective Equipment (PPE) including but not limited to face masks and hair nets

Food handlers are strictly prohibited from:

1. Engaging in actions that could contaminate food such as sneezing, coughing, or blowing over unprotected food or surfaces likely to come into contact with food.
2. Consuming food over unprotected surfaces.
3. Using tobacco products in areas where food is handled.
4. Handling food without first washing hands after contact with potential contaminants.
5. Wearing jewellery on hands and wrists while handling food.
6. Relieving themselves anywhere other than designated toilet facilities.

4.4 GOVERNMENT RESPONSIBILITIES

The Government at National and sub-national levels have the obligation to ensure food safety extends to the health and hygiene of food handlers. To uphold public health standards, the following obligations are mandated:

1. **Medical Testing:** The State Ministries of Health at all 36 States and the FCT must establish protocols for regular medical testing of food handlers to identify and manage health risks that could compromise food safety. This includes screening for communicable diseases that can be transmitted through food.
2. **Food Handlers Vaccination Programmes:** The State Government-certified centres for medical tests are to implement comprehensive vaccination programmes for food handlers to prevent the spread of illnesses. These programmes should be accessible and may include mandatory vaccinations against specific diseases.
3. **Reference Medical Facilities:** The State Ministries of Health at all 36 States and the FCT must provide or designate suitable reference medical facilities where food handlers can receive necessary health checks, vaccinations, and certifications. These facilities should be preselected in line with criteria set forth by MLSCN and available to all food handlers and food business operators

4. **Certification and Documentation:** The State Ministries of Health at all 36 States and the FCT are responsible for certifying that food handlers have passed the required medical tests and taken the necessary vaccinations within their jurisdiction. Official certificates issued must be digitally verifiable and as such generated through a central portal domiciled and archived within the Federal Ministry of Health and Social Welfare.
5. **Public Awareness:** Government MDAs at all levels, with the support of its stakeholders, should actively promote awareness among food businesses about the importance of medical testing and vaccination for food handlers. This includes providing information on available services and the implications of non-compliance.
6. **Epidemiology benefits for Food Safety Public health policy formulation and implementation design**: The Federal and State Ministries of Health should maximise the collected data from the Food Handlers Documentation database and illness reports from the Food business Owners for relevant public health policy decisions.
7. **Compliance and Regulatory Oversight:** The State Ministries of Health in all 36 States, including the Federal Capital Territory (FCT), and other respective MDAs should establish and enforce the necessary regulations to ensure adherence to these guidelines. They have the power to effect relevant punitive measures on any individuals or entities that fail to comply, in accordance with the applicable laws and regulations.

SECTION 5: MONITORING AND EVALUATION

Effective Monitoring and Evaluation (M&E) are crucial components for the successful implementation of the National Guideline for Food Handlers' Medical Tests. This chapter outlines the M&E plan to ensure compliance, measure impact, and drive continuous improvement in food safety practices across Nigeria.

5.1 OBJECTIVES

The primary objectives of the M&E plan are:

1. To ensure that food handlers comply with the medical testing and vaccination requirements.
2. To assess the impact of these guidelines on reducing foodborne diseases.
3. To provide data-driven insights for policy formulation and decision-making.
4. To foster accountability and transparency in the implementation process.

5.2 REPORTING AND FEEDBACK MECHANISMS

The M&E reporting and feedback mechanisms to ensure continuous improvement through:

1. **Periodic Reports:** Regular submission of compliance and impact reports by State Ministries of Health to the Federal Ministry of Health and Social Welfare.
2. **Feedback Loop:** Establishing channels for stakeholders to provide feedback and suggest improvements to the guidelines and their implementation.
3. **Data Analysis:** Leveraging data analytics to identify trends, measure impact, and inform decision-making.
4. **Digital Certification:** Ensuring that the central digital portal for all official certificates is digitally verifiable.

5.3 CONCLUSION

The Monitoring and Evaluation plan is integral to the successful implementation of the National Guideline for Food Handlers' Medical Tests. Through systematic monitoring, regular evaluations, and data-driven decision-making, we can ensure the effectiveness of these guidelines in enhancing food safety and protecting public health in Nigeria.

APPENDIX 1 - DEFINITION OF TERMS

Cleanliness	Elimination of soil, food residues, dirt, grease, or other objectionable matters.
Disinfection	Reduction of the number of microorganisms in the environment, utilizing chemical agents and/or physical methods, to a level that does not compromise the food's safety and appropriateness.
Facility	Any building or area where foods are handled, and their surroundings, are under one management.
Food	Any substance, whether processed, semi-processed or raw, which is intended for human consumption, and includes drink, chewing gum and any substance which has been used in the manufacture, preparation or treatment of food, but does not include cosmetics or tobacco or substances used only as drugs
Foodborne Diseases	These are diseases caused by the contamination of food and occur at any stage of the food production, delivery, and consumption chain.
Food Handler	Any person who directly handles packaged or unpackaged foods, equipment and utensils used for food, or surfaces that come into contact with food and which are thus expected to meet the food hygiene requirements.
Food Processors	Are individuals or entities involved in the transformation of raw food materials into consumable food products through various processes such as chopping, mixing, blending, cooking, packaging, and preserving
Food Safety	Assurance that food will not cause harm to the consumer when it is prepared and/or consumed in a manner consistent with its intended use.
Food Security	The state in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life
Food Hygiene	All conditions and measures necessary to ensure the safety and appropriateness of food along the entire food chain.
Good Hygiene Practices	Fundamental measures and conditions are applied at any step within the food chain to provide safe and suitable food.
Good Manufacturing Practices	Conformity with the practice codes, norms, regulations, and legislation on the production, processing, handling, labelling, and sale of food, issued by sectorial, local, state, national, and international bodies to protect the public from diseases, product adulteration, and fraud.
Maintenance Operators	These individuals handle the upkeep and repair of equipment and facilities. Those who operate CIP systems are particularly vital in ensuring that food processing equipment is thoroughly cleaned and sanitised, preventing the buildup of residues and potential contamination.

Medical Facility	Refers to establishments that are equipped and authorised to carry out health examinations and diagnostic tests including Hospitals, Clinics, Diagnostic Centres, Primary Health Centres, and Mobile Health Units.
Sanitation Personnel	These individuals are responsible for ensuring that the environment, including floors, walls, and non-food contact surfaces, remains clean and hygienic. Their work is crucial in preventing contamination and maintaining a safe food production environment.

APPENDIX 2 - MEDICAL EXAMINATION FOR FOOD HANDLERS ALONG THE FOOD SUPPLY CHAIN

Name:			
State of Domicile			
Nationality:		**Hospital No:**	
Address:	**Home:**	**Work Place:**	
Contact No:			

A. Declaration Form (to be completed by food handler)	**Yes**	**No**
1. Are you now, or have you over the last seven days, suffered from diarrhoea/vomiting?		
2. Have you suffered from a fever since more than one week ago?		
3. At present, are you suffering from: a. Skin trouble affecting hands, arms or face b. Boils, styes or sepsis on your fingers or hands c. Discharge from eye, ear, nose or gums/mouth		
4. Do you suffer from: a. Recurring skin or ear infection b. A recurring bowel disorder		
5. In the last 5 days, have you been in contact with anyone who may have been suffering from cholera?		
6. In the last 7 days, have you been in contact with anyone with diarrhoea or vomiting?		
7. In the last 21 days have you been in contact with anyone who may have been suffering from typhoid or paratyphoid or jaundice person?		
8. Have you ever had, or are you now known to be a carrier of typhoid or paratyphoid?		
9. Have you ever had, or are you now known to have typhoid fever?		

B. Physical Examination (To be completed by a doctor)	**Yes**	**No**
1. Fever		
2. Jaundice		
3. Skin infection on hands, arms, face		
4. Boils, styes or sepsis on finger		
5. Discharge from eye, ear, nose or gums/mouth		

C. Food Handlers Vaccination Record

Name of Recipient:
Date of Birth:
Gender:
Address of Recipient:
Name of Employer:

Stamped picture

Vaccine	**Date of vaccination**	**Brand name of Vaccine**	**Batch Number**	**Signature**	**Next visit** (Where applicable)	**Comments**
Typhoid Fever						
Hepatitis A						

Name of Vaccinator:
Hospital name/address:

D. Laboratory Test

Result

Positive	**Negative**

1. Stool culture (if required)
   a. Typhoid
   b. Cholera
2. Other tests (if required)

Case Summary

I hereby confirm that Mr/Ms/Mrs .... Hospital no. ..... registration/referral no..... had undergone medical examination and found to be:

- ☐ Healthy and fit to work as food handlers
- ☐ Not fit to work as a food handler
- ☐ Can return to work on _____

I declare that all the above statements are true and complete to the best of my knowledge.

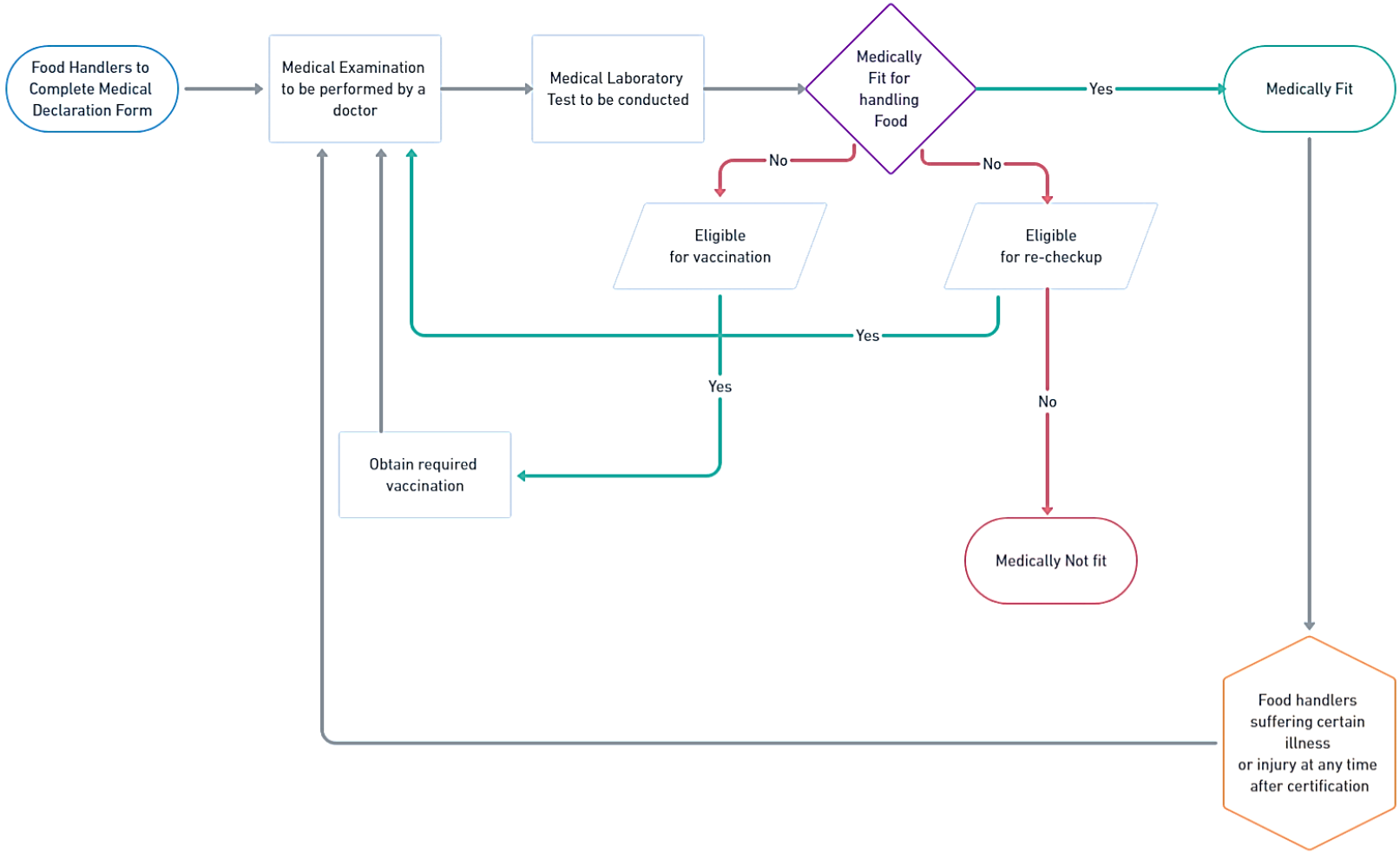
Signature: ..... Date: .....

Official Stamp

Name.....

Name of Hospital or Place of Practice: .....

APPENDIX 3 - MEDICAL EXAMINATION PROCESS FLOWCHART FOR FOOD HANDLERS ALONG THE FOOD SUPPLY CHAIN



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