



Faculty of Public Health & Tropical Medicine

Department of Epidemiology

Log Book of the Internship



Student Name:

University ID:

Graduation Year:

Foreword

It is a great pleasure to introduce this log book of the Internship to our students who successfully completed the courses of the Bachelor's Degree in Public Health, with major in Epidemiology. This log book will help undergraduate students to keep track of skills that are targeted to be acquired through practical attachment to different health premises. It also aims to give an opportunity to our students to be familiar with the health care system of Saudi Arabia and the practical approach for tackling community health problems.

I would like to thank our Dean, Dr. Mohammed Al Malki and the Vice Dean Mr. Anwar Alsharif for their continuous support and constructive remarks. I would like also to acknowledge the serious efforts of all faculty staff members of Epidemiology Department with special thanks to Prof. Neeraj Bedi, Dr. Sushil Dohare and Dr. Yasser Hassan for their significant contribution in preparation of this log book.

With Best Wishes.

Prof. Mohammed Kotb Sultan

Head of Epidemiology Department

Index

Internship Plan	4
Internship Domains	4
I. Primary Healthcare Center (PHC)	5
1. Demographic & Statistical Data in the Catchment Area	6
2. Endemic Communicable & Non Communicable Diseases	7
3. Immunization	8
4. Nutrition Assessment & Promotion	9
5. Environmental Sanitation Inspection	9
6. Health Education & Promotion	10
7. Medical Records	10
8. Healthcare Quality & Accreditation	10
Student Evaluation	11
II. Preventive Medicine Department	12
1. Surveillance of Communicable & Vector Borne Diseases	13
2. Outbreak Investigation	13
3. Report Writing & Presentation	14
Student Evaluation	15
III. General Hospital	16
1. Infection Control	17
2. Healthcare Quality & Accreditation	17
3. Management of Hazardous Waste	17
4. International Classification of Diseases and Deaths.	18
5. Health Education	18
Student Evaluation	19
IV. Healthcare Quality Administration	20
1. Standards & Indicators of Healthcare Quality	21
2. Quality Improvement	21
3. Accreditation	21
Student Evaluation	22
V. Vector Borne Control Centers	23
1. Investigation of Positive Cases of VBD	24
2. Prevention & Control Measures for Humans	24
3. Control of Vectors.	25
4. Precautions of Pesticide Application	25
Student Evaluation	26
VI. Statistics Unit	27
1. Data management & Analysis Using SPSS	28
2. Vital Statistics	28
Student Evaluation	29
Overall Internship Evaluation	30

Internship Plan

No.	Setting	Duration
1	Primary Health Care Center	6 Weeks
2	Preventive Medicine Department	11 Weeks
3	General Hospital	12 Weeks
4	Healthcare Quality Administration	2 Weeks
5	National Center of Vector Control / Malaria Plants	15 Weeks
6	Statistics Unit	2 Weeks
Total		48 Weeks

Internship Domains

No.	Setting	Domains	Duration
1	Primary Health Care Center	Demographic & Statistical Data in the Catchment Area	6 weeks
		Endemic Communicable & Non Communicable Diseases	
		Immunization	
		Nutrition Assessment & Promotion	
		Environmental Sanitation Inspection	
		Health Education & Promotion	
		Medical Records	
		Healthcare Quality & Accreditation	
2	Preventive Medicine Department	Surveillance of Communicable & Vector Borne Diseases	11 weeks
		Outbreak Investigation	
		Report Writing & Presentation	
3	General Hospital	Infection Control	12 weeks
		Healthcare Quality & Accreditation	
		Management of Hazardous Waste	
		International Classification of Diseases and Deaths	
		Health Education	
4	Healthcare Quality Administration	Standards & Indicators of Healthcare Quality	2 weeks
		Quality Improvement	
		Accreditation	
5	National Center of Vector Control / Malaria Plants	Investigation of Positive Cases of Vector Borne Diseases.	15 weeks
		Prevention & Control Measures for Humans	
		Control of Vectors.	
		Precautions of Pesticide Application	
6	Statistics Unit	Data management & Analysis Using SPSS	2 weeks
		Vital Statistics	
Total			48 Weeks

I. Primary Healthcare Center

(6 weeks)

Name of the PHC:

Name of the Supervisor:

Name of the PHC Director:

Period from **to**

Domains of Training:

1. Demographic & Statistical Data in the Catchment Area.
2. Endemic Communicable & Non-Communicable Diseases.
3. Immunization.
4. Nutrition Assessment & Promotion.
5. Environmental Sanitation Inspection.
6. Health Education and Promotion.
7. Medical Records.
8. Healthcare Quality & Accreditation.

I. 1. Demographic & Statistical Data in the Catchment Area

Skill	Description	Fulfillment	
		Yes	No
Summarize data in a tabular form.	<ul style="list-style-type: none"> - Specify the categories of data based on the upper and lower values of the data and the class interval. - Specify the table title in terms of time, place and person. - Specify the appropriate format and entries. 		
Summarize data in a graphical form.	<ul style="list-style-type: none"> - Specify the appropriate graphical presentation for each data type - Specify the graph title in terms of time, place and person. - Create an informative legend for the graph. - Develop the population pyramid for the population in the catchment area of the health center. 		
Calculate vital statistics.	<ul style="list-style-type: none"> - calculate Birth rate, Death rate, and rate of natural increase. - Calculate of incidence and prevalence rates of diseases of public health importance. - Calculate crude death rate , infant mortality rate, under-5 mortality rates, maternal mortality rates. 		
Communicate Results.	<ul style="list-style-type: none"> - Communicate results in appropriate verbal and written formate. 		

I. 2. Endemic Communicable & Non-communicable Diseases

Skill	Description	Fulfillment	
		Yes	No
Identify locally endemic communicable/non-communicable diseases	Preparing a list of locally endemic communicable/non-communicable diseases of Public Health Importance by review of records and reports available at PHC		
report the mandatory notifiable communicable diseases that are under surveillance in Saudi Arabia	fill up the notification forms of the notifiable communicable diseases and send the completed forms to the preventive medicine department on a daily, weekly or monthly basis according to the regulations of Ministry of Health.		
Investigate food poisoning cases.	<ul style="list-style-type: none"> - Carry out the Immediate reporting procedure of food poisoning cases - Interview patients to fill up the food poisoning questionnaire - Collect samples of incriminated food items for laboratory investigation - Follow up the results of stool and vomitus samples - Refere food handlers for laboratory investigation & check up - Investigate sanitary condition of the premises where food items prepared - Write down a concise food poisoning investigation report 		
Investigate a case of acute flaccid paralysis.	<ul style="list-style-type: none"> - Carry out the Immediate reporting procedure of an AFP case - Fill up "the AFP case investigation form of acute flaccid paralysis" - Collect 2 adequate stool samples, at least 24 hours apart - Arranging shipment of stool samples to WHO reference laboratory - Follow up of the results of laboratory virological stool analysis - Complete "the 60 - day follow up case investigation form" - Decide final classification of the case as polio / non-polio 		
Investigate a case of measles.	<ul style="list-style-type: none"> - Carry out the Immediate reporting procedure of a measles case - Fill up the case investigation form of measles - Facilitate in diagnosis of measles through arranging for withdrawal of blood sample for confirmatory diagnosis - Follow up of the laboratory results for final diagnosis 		
Apply control measures for contacts of pulmonary TB case.	<ul style="list-style-type: none"> - Ensure regular intake of anti-tuberculous through direct observation and support of patients - Advocate preventive methods as use of face mask, avoiding physical proximity, and periodic disinfection of patient sputum - Refere close contacts of the patient for check up & tuberculin test - Ensure intake of NIH chemoprophylaxis prescribed for close contacts - Follow up of patients to ensure complete cure 		
To assess the 'Essential Drugs' availability at PHC	<ul style="list-style-type: none"> - Check the "WHO list of Essential Drugs for PHC". - Calculate the % of drugs available at PHC - Check the drugs available for Common Communicable and Non Communicable group of diseases in Saudi Arabia. - Check the drugs available for Common Minor Ailments 		

I. 3. Immunization

Skill	Description	Fulfillment	
		Yes	No
Record & follow up of vaccination activities	Identify the essential information that should be registered for the administered vaccine (Batch no., Expiry date, and Manufacturer)		
	Track registration records to identify dropouts of EPI		
Appropriate use of the cold chain equipments	Refrigerator Thermometer: Interpret thermometer temperature (optimum temperature 2 – 8 °C).		
	Cold Box: - Appropriately arrange the ice packs inside the cold box to keep vaccines cool outside the refrigerator		
	Vaccine carrier: Appropriately arrange the vaccines inside the vaccine carrier.		
	Freezing Indicator: - Interpret the readings of the freezing indicator and action taken if the temperature goes below zero.		
	Vaccine Vial Monitor (VVM): - Identify the vaccines which have VVM. - Interpret the color changes in the VVM.		
	Water Bottles: Appropriately arrange water bottles inside the refrigerator and realize their significance		
Conduct a supervisory assessment of refrigerator & vaccines.	Check the presence of: - The refrigerator in a shaded place. - Frost in the freezer. - A temperature chart on the refrigerator door . - Twice daily recording of the temperature. - Ice packs in the freezer. - Different types of vaccines in their suitable places. - Water bottles. - Vaccine diluents.		
Assess the vaccine needs in the catchment area.	- Identify the target population for the vaccine annually ---- (A) - Identify the number of doses required --- (B) - List vaccine wastage rate (P). - Calculate the vaccine wastage multiplication factor (WMF) = $100/[100 - P]$ --- (C) - Calculate the number of doses required for a specific vaccine annually = $A \times B \times C$ - Add 25% as a reserve stock. - Calculate the number of doses required monthly.		
Monitor and interpret the vaccination coverage for EPI using a monitoring chart.	- Estimate the target population for EPI (under 1 year) = total population \times CBR \times (1 – IMR) - Specify the annual coverage objective you want to achieve. - Calculate the monthly coverage objective. - Record the vaccine doses administered every month. - Calculate the cumulative & annual total. - Plot the cumulative administered doses on a monitoring chart. - Interpret the data for decision making.		

I. 4. Nutrition Assessment & Promotion

Skill	Description	Fulfilment	
		Yes	No
To assess the nutritional status of population at PHC	<ul style="list-style-type: none"> - To take the anthropometric measurement of infants, under 5 children, adolescents and adults. - To calculate BMI. - To interpret anthropometric measurement using the Saudi Growth Curves. 		
Promotion of proper nutrition and life style changes related to food.	<ul style="list-style-type: none"> - Nutrition education to promote adequate consumption vegetables and fresh fruits. - Giving nutrition advice to Hypertension, Diabetic patients, Obese, Malnutrition children. 		

I. 5. Environmental Sanitation Inspection

Skill	Description	Fulfilment	
		Yes	No
Collection of water samples for laboratory analysis.	<ul style="list-style-type: none"> - Follow the standards procedure for sampling tap and bottled water. 		
Assessment of the basic environmental sanitation in the catchment area of the PHC	<ul style="list-style-type: none"> - Prepare a check list to assess the parameters of environmental sanitation. - Direct observation through walking around the catchment area of the PHC. - Identify sites of potential environmental hazards, such as sewage overflow, unsanitary refuse accumulation and stagnant water. - Identify breeding places of houseflies, mosquitos, rodents and stray animals. 		

I. 6. Health Education & Promotion

Skill	Description	Fulfillment	
		Yes	No
Identify the health awareness of served population about specific health problems.	Carry out a simple study to assess the Knowledge , attitude and practices of population served, towards prevention , control and treatment of locally endemic communicable and non-communicable diseases		
Specify the audience, the health topic, approach and materials.	<ul style="list-style-type: none"> - Specify the target population, objectives, method, material, time and place of the health education session. - Prepare a public health lecture/power point presentation/video/ poster for the public health problems, such as: <ul style="list-style-type: none"> o Vaccine preventable diseases. o Vector borne diseases: malaria and dengue. o Chronic diseases: diabetes, CVDs. o Life style: smoking, eating habits, khat chewing, physical exercises etc. o Personal hygiene. 		
Organize and conduct a health education session.	<ul style="list-style-type: none"> - Select proper time and palce for the session. - Ensure efficient audio-visual facilities. - Evaluate the knowledge before and after the session. 		

I. 7. Medical Records

Skill	Description	Fulfillment	
		Yes	No
Filling, storage and retrieving of medical records and Referrals	<ul style="list-style-type: none"> - Create medical record for a new family. - Save the record in their proper location in the record system. - Retrieve the record. - Adhere to the ethical principles in filing, storing, and retrieving the data. 		

I. 8. Healthcare Quality & Accreditation

Skill	Description	Fulfillment	
		Yes	No
Identify types of standards in healthcare quality, based on CBAHI	- Check CBAHI Quality Manual and identify different Standards of Primary Health Care Centers.		
Assess the quality of primary health care services using CBAHI standards.	<ul style="list-style-type: none"> - Prepare a check list to decide whether the Standards are met or unmet. - Conduct Internal audit to identify gaps for Standards 		
Conduct quality improvement of primary health care services.	- Prepare and develop a quality improvement using FOCUS-PDCA Model.		

Student Evaluation

1. Knowledge & Skills (K&S)						
No.	Domains	Grade				
		1	2	3	4	5
1	Demographic & statistical data in the catchment area					
2	Endemic Communicable & Non Communicable Diseases					
3	Immunization					
4	Nutrition Assessment & Promotion					
5	Environmental Sanitation Inspection					
6	Health Education & Promotion Activities					
7	Medical Records					
8	Healthcare Quality & Accreditation					
Average Score of K & S (Total of all scores of K & S / Number of Domains) =						
2. Attitude						
No.	Criteria	Grade				
		1	2	3	4	5
1	Regular attendance on time					
2	Communicate properly.					
3	Perception of personal limitations and ask for help & advice.					
4	Maintain confidentiality of data.					
5	Show respect for other opinions.					
6	Work cooperatively and is reliable					
7	Complete tasks on time.					
8	Respect colleagues, including non- professionals.					
9	Realize the importance of continuing professional development.					
10	Demonstrate self-analysis to identify strengths and deficiencies.					
Average Score of Attitude (Total of all attitude scores / Number of Criteria) =						

• Name of the Supervisor:

Signature:

• Name of the Director:

Signature:

Stamp

II. Preventive Medicine Department

(11 weeks)

Name of the Supervisor:

Name of the Director:

Period from **to**

Domains of Training:

1. Surveillance of Communicable & Vector Borne Diseases.
2. Outbreak Investigation.
3. Report Writing & Presentation.

II. 1. Surveillance of Communicable & Vector Borne Diseases

Skill	Description	Fulfillment	
		Yes	No
Familiarize with various Outbreak Investigations Forms available at PHC	Prepare a list of Templates/Forms available for Outbreak Investigations for different communicable diseases		
Summarize the data reported from peripheral health institutions.	<ul style="list-style-type: none"> - Identify the Various Forms/Templates Used to Collect the Data on Communicable Diseases and Vector Borne Diseases under Surveillance by Saudi Health Ministry - Fill up the Various Forms of diseases - Summarize data in the form of tables - Highlight observed variations 		
Analyze reported data for trend.	<ul style="list-style-type: none"> - Analyze morbidity data according to Time, place and person using SPSS program - Identify rural/ urban and seasonal variation in disease pattern 		
Write feedback reports to reinforce control measures.	<ul style="list-style-type: none"> - Draw conclusions from analyzed data to reinforce control measures - Prepare a summary to be periodically disseminated to reporting sites 		

II. 2. Outbreak Investigation

Skill	Description	Fulfillment	
		Yes	No
Recognize the chronological steps of outbreak investigation	<ol style="list-style-type: none"> 1. Confirm medical diagnosis through laboratory investigation 2. Verify an outbreak by comparison of reported cases over time 3. Develop case definition based on type of disease or condition 4. Describe outbreak in time, place, persons and develop hypothesis 5. Develop questionnaire for collecting the required data 6. Search for unrecognized cases in hospitals, health center and households 7. Select appropriate study design for data analysis. 8. Enter, edit, analyze data using SPSS to test hypothesized risk factors 9. Implement appropriate control measures. 10. Evaluate the effectiveness of the implemented control measures. 11. Prepare outbreak investigation report 12. Communicate findings 		
Critically review of a recently local outbreak	<ul style="list-style-type: none"> - Check Outbreak Reports of Communicable diseases, that have occurred locally, during the last 5 years. - List out the 'Communicable Diseases' outbreaks that have been reported - Critically review "ONE Outbreak Report" for following <ul style="list-style-type: none"> o Verification of Outbreak. o confirmation of diagnosis. o Description of Time, Place and Person. o Hypothesis causes/risk factors. o Testing of Hypothesis. o Assessment of risk factors. o Suggested preventive and control measures. o Impact of implementation of Control measures, o Prepare a 'brief report' after critical review 		

II. 3. Report Writing & Presentation

Skill	Description	Fulfillment	
		Yes	No
Write a report on one of outbreaks that has recently occurred locally.	<ul style="list-style-type: none">- Prepare a structured report of an outbreak that has recently occurred locally.- Present the main points of the report by a power point presentation.		

Student Evaluation

1. Knowledge & Skills (K&S)						
No.	Domains	Grade				
		1	2	3	4	5
1	Surveillance of Communicable & Vector Borne Diseases					
2	Outbreak Investigation					
3	Report Writing & Presentation					
Average Score of K & S (Total of all scores of K & S / Number of Domains) =						
2. Attitude						
No.	Criteria	Grade				
		1	2	3	4	5
1	Regular attendance on time					
2	Communicate properly.					
3	Perception of personal limitations and ask for help & advice.					
4	Maintain confidentiality of data.					
5	Show respect for other opinions.					
6	Work cooperatively and is reliable					
7	Complete tasks on time.					
8	Respect colleagues, including non- professionals.					
9	Realize the importance of continuing professional development.					
10	Demonstrate self-analysis to identify strengths and deficiencies.					
Average Score of Attitude (Total of all attitude scores / Number of Criteria) =						

• Name of the Supervisor:

Signature:

• Name of the Director:

Signature:

Stamp

III. General Hospital

(12 weeks)

Name of the Hospital:

Name of the Supervisor:

Name of the Director:

Period from **to**

Domains of Training:

1. Infection Control.
2. Healthcare Quality & Accreditation.
3. Management of Hazardous Waste.
4. International Classification of Diseases and deaths.
5. Health Education.

III. 1. Infection Control

Skill	Description	Fulfillment	
		Yes	No
Identify roles and responsibility of infection control team.	<ul style="list-style-type: none"> - Check the Infection Control Committee Constitution Document. - Check and review the Minutes of Infection Control Committee. 		
Monitor disinfection of surfaces.	<ul style="list-style-type: none"> - Check Schedule of Disinfection Process Document. - Check Standards of Disinfection Process Document. - Check the Disinfection by Physical Presence by using a Tool of Check list to be prepared by students. 		
Specify the appropriate methods of sterilization for different items.	<ul style="list-style-type: none"> - Develop a check list. - Visit and Check the Sterilization Department Document for sterilization of different items. 		
Monitor the efficiency of the sterilization process.	<ul style="list-style-type: none"> - Check the Register for Tests applied to check the adequacy of Sterilization process- Bow Dick test register. 		

III. 2. Healthcare Quality & Accreditation

Skill	Description	Fulfillment	
		Yes	No
Identify types of standards in healthcare quality.	Check the Quality Manual and identify different Standards of the hospital.		
Assess the quality of health services using CBAHI standards.	Prepare a check list and decide whether the standards are met or unmet and identify the gaps.		
Conduct quality improvement of health services.	<ul style="list-style-type: none"> - Prepare and develop a quality improvement using FOCUS-PDCA Model. - Check the Quality Indicators available in hospital and Prepare a list 		

III. 3. Management of Hazardous Waste

Skill	Description	Fulfillment	
		Yes	No
Supervise the collection, segregation, storage, transportation and disposal of hazardous waste.	<ul style="list-style-type: none"> - Prepare a check list to judge compliance with standards management of Biomedical hazardous waste . - Fill up check list through on site direct observation to identify compliance with the standards methods of hazardous waste: collection, segregation, storage, transportation,. 		

III. 4. International Classification of Diseases & Deaths

Skill	Description	Fulfillment	
		Yes	No
Code cause of morbidity and mortality using the ICD10	<ul style="list-style-type: none"> - Determine from the medical records, the condition that to be coded, - Use the Alphabetical Index book of "WHO ICD -10" (Vol. 3) to locate the condition and the code. - Use the Tabular List book "WHO ICD -10" (Vol. 1) to ascertain that the code found in the Index is correct by reviewing all coding instructions related to that code. - Get it confirmed by health officer in charge of medical records department 		

III. 5. Health Education

Skill	Description	Fulfillment	
		Yes	No
Conduct a health education session for inpatients.	<ul style="list-style-type: none"> - Specify the target population, objectives, method, material, time and place of the health education session. - Implement and evaluate of the session. 		
To develop communication skills as a Public Health Core Competency	<ul style="list-style-type: none"> - Prepare a Public Health Lecture/Power Point Presentation/Video/ Poster with health Messages in 'Arabic' and English for all the Public Health Problems (10 slides for 10 minutes duration) - Vaccine Preventable Diseases , MERS, CoronaVirus transmission - Vector borne diseases- Malaria, Dengue. - Diabetes - Obesity - Hypertension - Cancer - Life style changes for chronic diseases-smoking, eating habits, khat chewing, physical exercises etc. - Personal Hygiene significance with treatment seeking behavior, health seeking behavior. - Presentation to Group of patients of 5-10 patients at PHC. 		

Student Evaluation

1. Knowledge & Skills (K&S)						
No.	Domains	Grade				
		1	2	3	4	5
1	Infection Control					
2	Healthcare Quality & Accreditation					
3	Management of Hazardous Waste					
4	International Classification of Diseases and Deaths					
5	Health Education					
Average Score of K & S (Total of all scores of K & S / Number of Domains) =						
2. Attitude						
No.	Criteria	Grade				
		1	2	3	4	5
1	Regular attendance on time					
2	Communicate properly.					
3	Perception of personal limitations and ask for help & advice.					
4	Maintain confidentiality of data.					
5	Show respect for other opinions.					
6	Work cooperatively and is reliable					
7	Complete tasks on time.					
8	Respect colleagues, including non- professionals.					
9	Realize the importance of continuing professional development.					
10	Demonstrate self-analysis to identify strengths and deficiencies.					
Average Score of Attitude (Total of all attitude scores / Number of Criteria) =						

• **Name of the Supervisor:**

Signature:

• **Name of the Director:**

Signature:

Stamp

IV. Healthcare Quality Administration

(2 weeks)

Name of the Supervisor:

Name of the Director:

Period from **to**

Domains of Training:

1. Standards & Indicators of Healthcare Quality.
2. Quality Improvement.
3. Accreditation.

IV. 1. Standards & Indicators of Healthcare Quality

Skill	Description	Fulfillment	
		Yes	No
Check standards & indicators of different healthcare services at PHCs.	Obtain CBAHI- primary health care standards; assess compliance with each standard based on four points scale, through interview, observation or document review.		
Check standards & indicators of different healthcare services at hospitals.	Obtain CBAHI- hospital standards, assess compliance with each standard based on four points scale, through interview, observation or document review.		

IV. 2. Quality Improvement

Skill	Description	Fulfillment	
		Yes	No
Plan and conduct quality improvement for specific health services using FOCUS-PDCA.	<ul style="list-style-type: none"> - Find a problem, organize team, clarify current information about the problem, understand root causes, select the improvement process, plan, do, check, act - Write ,prepare and present a report 		

IV. 3. Accreditation

Skill	Description	Fulfillment	
		Yes	No
Conduct internal assessment (Mock Survey) to prepare the health facility for accreditation.	Obtain checklist of all applicable standards elements, assess each standard element on four-point scale, ensure that all applicable standards are at a satisfactory level for accreditation endorsement.		

Student Evaluation

1. Knowledge & Skills (K&S)						
No.	Domains	Grade				
		1	2	3	4	5
1	Standards & Indicators of Healthcare Quality					
2	Quality Improvement					
3	Accreditation					
Average Score of K & S (Total of all scores of K & S / Number of Domains) =						
2. Attitude						
No.	Criteria	Grade				
		1	2	3	4	5
1	Regular attendance on time					
2	Communicate properly.					
3	Perception of personal limitations and ask for help & advice.					
4	Maintain confidentiality of data.					
5	Show respect for other opinions.					
6	Work cooperatively and is reliable					
7	Complete tasks on time.					
8	Respect colleagues, including non- professionals.					
9	Realize the importance of continuing professional development.					
10	Demonstrate self-analysis to identify strengths and deficiencies.					
Average Score of Attitude (Total of all attitude scores / Number of Criteria) =						

• Name of the Supervisor:

Signature:

• Name of the Director:

Signature:

Stamp

V. National Center of Vector Control / Malaria Plants

(15 weeks)

Name of the Supervisor:

Name of the Director:

Period from **to**

Domains of Training:

1. Investigation of positive cases of vector borne diseases.
2. Prevention & Control Measures for humans.
3. Control of Vectors.
4. Precautions of Pesticide Application.

V.1. Investigation of Positive Cases of Vector Borne Diseases

Skill	Description	Fulfillment	
		Yes	No
Investigate a positive case of Malaria, Dengue Fever and Rift Valley Fever.	<ul style="list-style-type: none"> - Fill up the case investigation form of VBD. - Classify cases into locally infected or imported. - Follow up the cases for final outcome. 		

V.2. Prevention and Control Measures for Humans

Skill	Description	Fulfillment	
		Yes	No
Identify types & guidelines of administering malaria prophylaxis.	<p>Chemoprophylaxis: taken? If Yes, which type?</p> <p>Primary Prophylaxis: Use of anti-malaria drugs at recommended dosage, started 2 weeks before departure to a malarious area and continued for the duration of stay and for 4 weeks after return.</p> <p>Causal prophylaxis: This prevents the establishment of infection in the liver by inhibiting the pre-erythrocytic schizogony. Primaquine and proguanil are effective as causal prophylactic drugs.</p> <p>Terminal Prophylaxis: Terminal prophylaxis is the administration of primaquine for two weeks after cure to tackle the hypnozoites of <i>P. vivax</i> and <i>P. ovale</i> that can cause relapses of malaria.</p>		
Conduct Health education session for at risk individuals about measures of preventing VBDs	<p>Prepare, conduct, evaluate a health education session on:</p> <p>Role of Personal Protection Measures:</p> <ul style="list-style-type: none"> • Staying in well-screened areas. • Using mosquito nets. • Wearing clothes that cover most of the body. • Use of skin repellents. • Space spraying of insecticides. 		

V.3. Control of Vectors

Skill	Description	Fulfillment	
		Yes	No
Locate the breeding sites of mosquitoes.	<ul style="list-style-type: none"> - Community survey to locate mosquitos breeding sites. - Collect samples of water for detection of larvae. 		
Identify different methods of mosquito control.	<ul style="list-style-type: none"> - Mechanical control e. g., change the character of water. - Biological control (by natural enemies e. g., fish). - Chemical control (pesticides). 		

V. 4. Precautions of Pesticide Application

Skill	Description	Fulfillment	
		Yes	No
Monitor the compliance with protective guidelines.	<p>Check the label for:</p> <ul style="list-style-type: none"> - The label is in English and in Arabic. - Contents indicated. - Safety instructions (warnings) are present. <p>Storage and transport:</p> <ul style="list-style-type: none"> - Pesticides is in their original containers. - Not accessible to unauthorized people or children - Kept in a place where they might not be mistaken for food or drink. - Kept dry - Kept away from fires and out of direct sunlight - Transported in a vehicle that is not used to transport food. <p>Spraying:</p> <ul style="list-style-type: none"> - Protective clothes while handling. - Measures in the event of swallowing or contamination. <p>Disposal:</p> <ul style="list-style-type: none"> - Safe disposal by pouring it into a specially dug hole in the ground or a pit latrine - Is it disposed of where it may enter water used for drinking or washing, fish ponds or river? - Hole at least 100 meters away from streams, wells and houses. - In a hilly area the hole is on the lower side of such areas? - Containers, boxes and bottles used for pesticides are also buried. - Hole is closed as soon as possible. 		

Student Evaluation

1. Knowledge & Skills (K&S)						
No.	Domains	Grade				
		1	2	3	4	5
1	Investigation of Positive Cases of VBD					
2	Prevention & Control Measures for Humans					
3	Control of Vectors.					
4	Precautions of Pesticide Application					
Average Score of K & S (Total of all scores of K & S / Number of Domains) =						
2. Attitude						
No.	Criteria	Grade				
		1	2	3	4	5
1	Regular attendance on time					
2	Communicate properly.					
3	Perception of personal limitations and ask for help & advice.					
4	Maintain confidentiality of data.					
5	Show respect for other opinions.					
6	Work cooperatively and is reliable					
7	Complete tasks on time.					
8	Respect colleagues, including non- professionals.					
9	Realize the importance of continuing professional development.					
10	Demonstrate self-analysis to identify strengths and deficiencies.					
Average Score of Attitude (Total of all attitude scores / Number of Criteria) =						

• **Name of the Supervisor:**

Signature:

• **Name of the Director:**

Signature:

Stamp

VI. Statistics Unit

(2 weeks)

Name of the Supervisor:

Name of the Director:

Period from **to**

Domains of Training:

1. Data management & Analysis using SPSS.
2. Vital Statistics.

VI. 1. Data Management & Analysis Using SPSS

Skill	Description	Fulfillment	
		Yes	No
Using SPSS for data entry	<ul style="list-style-type: none"> - Create variables. - Specify the variable attributes. - Enter data. - Save file. 		
Tabulate data.	<ul style="list-style-type: none"> - Specify the categories based on the upper and lower values and the class interval. - Specify the table title in terms of time, place and person. - Specify the appropriate format and entries. 		
Present data graphically.	<ul style="list-style-type: none"> - Specify the appropriate graphical presentation for each data type - Specify the graph title in terms of time, place and person. - Create an informative legend for the graph. 		
Calculate & interpret: <ul style="list-style-type: none"> o Measures of central tendency. o Measures of dispersion. o Ratios & proportions. o Incidence & prevalence. 	<ul style="list-style-type: none"> - Define, compare and calculate the mean, median and mode. - Calculate and differentiate and interpret the range, inter-quartile range, variance and standard deviation. - Calculate and differentiate between ratio and proportion. - Calculate and differentiate between incidence and prevalence. 		
Select the appropriate statistical tests based on the type of data and the hypothesis.	<ul style="list-style-type: none"> - Conduct and interpret parametric tests (e.g., t-test) - Conduct and interpret non-Parametric tests (e.g., Mann-Whitney test). 		

VI. 2. Vital Statistics

Skill	Description	Fulfillment	
		Yes	No
Calculate incidence & prevalence rates	Identify the numerator and denominator in incidence & prevalence rates.		
Calculate birth rates.	Identify the numerator and denominator in birth rates.		
Calculate crude death rate.	Identify the numerator and denominator in crude death rate.		
Calculate specific death rates.	Identify the numerator and denominator in specific death rates.		

Student Evaluation

1. Knowledge & Skills (K&S)						
No.	Domains	Grade				
		1	2	3	4	5
1	Data management & Analysis using SPSS					
2	Vital Statistics					
Average Score of K & S (Total of all scores of K & S / Number of Domains) =						
2. Attitude						
No.	Criteria	Grade				
		1	2	3	4	5
1	Regular attendance on time					
2	Communicate properly.					
3	Perception of personal limitations and ask for help & advice.					
4	Maintain confidentiality of data.					
5	Show respect for other opinions.					
6	Work cooperatively and is reliable					
7	Complete tasks on time.					
8	Respect colleagues, including non- professionals.					
9	Realize the importance of continuing professional development.					
10	Demonstrate self-analysis to identify strengths and deficiencies.					
Average Score of Attitude (Total of all attitude scores / Number of Criteria) =						

• Name of the Supervisor:

Signature:

• Name of the Director:

Signature:

Stamp

Overall Internship Evaluation*

No.	Setting	Average Score of K & S	Average Score of Attitude
1	Primary Health Care Centers		
2	Preventive Medicine Department		
3	General Hospitals		
4	Healthcare Quality Administration		
5	Vector Borne Control Centers		
6	Statistics Unit		
Total of Average Scores			
Overall Average Score (Total of Average Scores / 6)		Ⓐ	Ⓑ
Overall Evaluation Score = (A × 14) + (B × 6)		 %

* This evaluation table is filled up by the faculty supervisor

Name of the Intern:

Signature:

Name of the Faculty Supervisor:

Signature:

Name of the Dean/Vice Dean:

Signature:

Stamp of the FPHTM