

### Department of Community Medicine Kulliyyah of Medicine

# Course Guideline & Log Book PUBLIC HEALTH (MED4106)

Name	:
Matric No	:
Posting Period	: From To
Supervisor's Na	nme:

#### **PREFACE**

Dear Brothers and Sisters.

Welcome to Public Health Posting. In this posting you will learn to apply Public Health medicine which you had learnt partly in Year 1. You will be posted to various Public Health programmes in the Ministry of Health where you can observe and participate in all the Public Health activities. Gain as much experience as possible to equip you with preventive components of patient and population health care.

You are also required to conduct a community survey to learn population health status and their health seeking behaviour, and to learn how to encourage community participation in maintaining wellness. You will be given an opportunity of a lifetime, to visit some of the most remote villages in Peninsular Malaysia located along Tembeling River. There, where you can observe the difficulties faced by the people and learn how healthcare are delivered to such area.

This logbook is designed to assist you in learning and experience the practice of Public Health in community. This is a student-centred learning process where you will record your own experience in Public Health posting according to the topics given. You will record the learning methods i.e. how you obtained the information, which could come from the lectures, briefings or field visits acquired during the posting. Learning points are the knowledge and experience you gained at the end of each session. Please make extra effort to find extra information for ALL topics mentioned here. Any of the topics mentioned in this logbook can be asked in your final examination.

You are required to verify all the experiences you had obtained from the responsible lecturers or officers who gave or manage the programmes.

Please update this logbook, as it will be used for your continuous assessment of the whole Public Health Posting.

Happy learning.

## Associate Professor Dr Jamalludin Ab Rahman

Head, Department of Community Medicine, Kulliyyah of Medicine, International Islamic University Malaysia. October 2011

#### **COURSE OUTCOMES**

At the end of this course you should be able to:

- 1. Acquire and apply basic knowledge of public health medicine.
- 2. Describe the public health services provided by the government.
- 3. Critically appraise evidences in medicine. design, conduct, manage and report research.
- 4. Communicate, investigate and evaluate community health need for them to plan, organise and advocate healthy lifestyle in the community.
- 5. Work as an individual and in a group, with leadership, and managerial capabilities.

## Contents

Preface	2
Course Outcomes	3
Contents	4
Learning Outcomes	5
Log Books	12
1. Communicable Disease Control (CDC)	13
2. Vector Borne Disease Control	14
3. Family & Nutritional Health	15
4. Hiv/Sti Disease Control	16
5. Sanitation Health (BAKAS) & Drinking Water Quality Control (KMAM)	17
6. Occupational Health	18
7. Food Safety & Quality Control (FSQC)	19
8. Health Enforcement	20
9. School Health Programme	21
10. Health Education Programme	21
11. Dental Health Programme	22
12. International Health	22
13. Special Programmes	23
14. Research Methodology	24
15. District Hospital Posting	25
Evaluation	26

## **LEARNING OUTCOMES**

#	Content	Learning Outcomes
1	Principles of epidemiology	<ol> <li>Describe &amp; discuss the principles of epidemiology</li> <li>Design, describe &amp; campare the different epidemiological studies</li> <li>Delineate &amp; explain the association between exposures and outcomes</li> <li>Calculate and interprete measures of association</li> <li>Describe &amp; explain biases including confounding.</li> </ol>
2	Research methodology	<ol> <li>Describe &amp; discuss the important of research</li> <li>Select, analyse &amp; prioritise topic for research</li> <li>Describe &amp; compare different research designs</li> <li>Describe &amp; compare different sampling methods</li> <li>Calculate sample size</li> <li>Search &amp; summarise literature review</li> <li>Plan for data collection &amp; management</li> <li>Plan for statistical analysis</li> <li>Report and present research findings.</li> </ol>
3	Biostatistics	<ol> <li>Describe, discuss and compare the difference level of measurements</li> <li>Describe and compare statistics &amp; parameter</li> <li>Describe and discuss probability distribution</li> <li>Create and enter data into SPSS</li> <li>Describe, discuss, analyse &amp; report descriptive statistics</li> <li>Describe, compare, run &amp; report different type of univariate/bivariable analyses</li> </ol>
4	Health Organisation in Ministry of Health Malaysia	<ol> <li>Describe and explain the organisation of the MOH at national, state &amp; district levels</li> <li>Compare the function &amp; role of MOH at national, state &amp; districts</li> </ol>

#	Content		Learning Outcomes
5	Epidemiology of Vector Borne Disease in Malaysia	1) 2) 3)	Describe and discuss the magnitude of vector borne diseases in Malaysia Describe, compare & strategise measures to control & prevent vector bourne disease Describe laws related to control & prevention of vector bourne disease
6	Epidemiology of Communicable Diseases in Malaysia	1) 2) 3)	Describe and discuss the magnitude of communicable diseases in Malaysia Describe, compare & strategise measures to control & prevent communicable disease Describe laws related to control & prevention of communicable disease
7	Epidemiology of Non- Communicable Diseases in Malaysia	1) 2) 3)	Describe and discuss the magnitude of non-communicable diseases in Malaysia Describe, compare & strategise measures to control & prevent of non-communicable disease Describe laws related to control & prevention of of non-communicable disease
8	Outbreak Investigation & Control	1) 2) 3) 4) 5)	Describe at least three ways that outbreaks are recognized Discuss the components of outbreak investigation List the reasons for and steps in an outbreak investigation Explain and use of the basic tools of field epidemiology Outline the control measures of outbreaks.
9	Family health development	1) 2) 3) 4)	Explain the historical background of family health development in Malaysia Describe the important global and national targets Discuss on the programmes and activities of family health development Criticise on the trend of health indicators in family health development in Malaysia
10	Nutritional health	1) 2) 3) 4)	Discuss the importance of nutrition in public health State what is nutritional assessment List the methods used in assessing nutritional status Explain the advantages and disadvantages of the methods used in in assessing nutritional status

#	Content		Learning Outcomes
11	Health promotion in Malaysia	1) 2) 3) 4) 5)	1)State what is meant by health promotion Describe the importance of health promotion List 5 principles of Ottawa charter Discuss the health promotion process Explain the 5 health promotion approaches
12	Public health services in Malaysia	1) 2) 3) 4)	Describe and discuss the type and functions of public health services provided by the Ministry of Health Participate in the public health programmes Describe and discuss the preventive aspects of each public health service/programme Compare the facilities between different public health service provider
13	Rural health services	1) 2) 3)	Analyse, describe and discuss the health seeking behaviour of people in rural area Interact and communicate with people in rural area Understand and fit in with the culture of the community
14	Principles of environmental health	1) 2) 3) 4) 5)	Define environment, environmental health and environmental pollution. Classify different types of hazards in the environment Discuss on the ecological disturbances and disease development. Describe local, regional and global ecological disturbances phenomena. Discuss on the preventive measures of environmental health
15	Environmental health in Malaysia	1) 2) 3)	Explain the activities of environmental health units or agencies in relation to hazards pathway  Discuss on the programmes and monitoring activities of environmental health in Malaysia.  Criticized on the trend of important environmental pollutions in Malaysia.

#	Content	Learning Outcomes
16	Environmental health seminar1 (Indoor Air Pollution)	<ol> <li>List the types and sources of indoor air pollutants</li> <li>Describe the toxicity of air pollutants</li> <li>Discuss on the health effects of indoor air pollutions</li> <li>Explain the principles of preventive measures of indoor air pollution</li> <li>Relate air pollution with Islamic perspectives</li> </ol>
17	Environmental health seminar 2 (Climate change)	<ol> <li>Describe the phenomenon of climate change</li> <li>Explain the factors that contribute to climate change</li> <li>Discuss on the direct and indirect health impacts of climate change</li> <li>Discuss on the mitigation measures of climate change</li> <li>Relate climate change phenomenon with Islamic perspectives</li> </ol>
18	Environmental health seminar 3 (Environmental Health Risk Assessment)	<ol> <li>Define environmental health risk assessment (EHRA)</li> <li>Describes the steps in EHRA</li> <li>Evaluate the health risk of a population by giving an example of a chemical that they exposed to.</li> <li>Discuss on the risk management.</li> </ol>
19	Principles of occupational health	<ol> <li>Discuss the epidemiology of occupational diseases in Malaysia</li> <li>Explain the notification process of occupational diseases in Malaysia</li> <li>Describe the methods of hazard identification</li> <li>List types of workplace hazards</li> <li>Explain the control measures of hazard at workplace</li> </ol>

#	Content		Learning Outcomes
20	Occupational health seminar 1 (Asthma)	1) 2) 3) 4) 5)	Discuss the epidemiology of occupational asthma Discuss the types of occupational asthma Describe the use of spirometry and peak expiratory flow meter in diagnosing occupational asthma Describe the law/regulation to protect workers in Malaysia Describe the preventive measures if workers are exposed to dust or hazardous chemicals at workplace
21	Occupational health seminar 2 (Noise Induced Hearing Loss)	1) 2) 3) 4) 5) 6)	Discuss the epidemiology of occupational noise induced hearing loss Discuss the pathophysiology of noise induced hearing loss List the characteristics of noise induced hearing loss Explain the use of audiometry assessment in diagnosing noise induced hearing loss Describe the law/regulation to protect workers in Malaysia from noise exposure at workplace Describe the preventive measures if workers are exposed to hazardous noise at workplace.
22	Occupational health seminar 3 (Work related musculoskeletal disorder)	1) 2) 3) 4)	Discuss the epidemiology of work – related musculoskeletal disorder Explain the risk factors for work – related musculoskeletal disorder Discuss the common work – related musculoskeletal disorder Describe the laws/regulations to protect workers in Malaysia from work – related musculoskeletal disorder Describe the preventive measures if workers are exposed to work – related musculoskeletal disorder

#	Content	Learning Outcomes
23	Walkthrough survey (industrial visit)	<ol> <li>Identify and describe the hazards at workplace.</li> <li>Discuss the possible occupational safety and health problems due to hazards exposure at workplace</li> <li>Discuss the guidelines, acts and regulations related to occupational health and safety issues.</li> </ol>
24	Critical appraisal	<ol> <li>Analyse the strength and weakness of scientific articles</li> <li>Organise the points, and report and appraise scientific articles critically</li> <li>Express own opinion and judgements</li> </ol>
25	Community survey	Ability to apply research methodology to investigate, analyse, interpret & evaluate community health need for them to plan, organise and advocate healthy lifestyle in the community.

# **LOG BOOKS**

# 1. COMMUNICABLE DISEASE CONTROL (CDC)

Topic	Date	Learning Points	References	Verification
Epidemic/outbreak management				
Contact tracing				
Food & water borne diseases				
· Food poisoning				
· Cholera				
· Typhoid				
· Others (eg. Hepatitis A)				
Tuberculosis control program				
Notifiable diseases				
Notification process				

2. VECTOR BORNE DISEASE CONTROL					
Topic	Date	Learning Points	References	Verification	
Concept of vector borne disease management					
· Disease control					
· Vector control					
Dengue Prevention & Control					
Malaria Prevention & Control					
Filaria Prevention & Control					
Japanese Encephalitis Prevention & Control					
Fogging/spraying					
· Chemical used					
· Types of fogging/machines used					
· Side effects					
GIS (Geographical Information System) - Application in vector control					

3. FAMILY & NUTRITIONAL HEALTH						
Topic	Date	Learning Points	References	Verification		
Maternal health						
· Antenatal care						
· Home visit						
· Maternal mortality investigation						
· lodine supplement						
· ABC etc						
Child health						
· Immunization						
· Food basket						
· Home visit						
National Health Indicators & District						
Specific Approach (Name ALL the indicators & their target)						
Adolescence & geriatric health						
(Klinik Warga Tua)						
Community rehabilitation centre						
Healthy citizen clinic						

4. HIV/STI DISEASE CONTROL					
Торіс	Date	Learning Points	References	Verification	
HIV screening programme					
· Antenatal screening					
· Drug users screening					
· Rapid test kit					
Napia test Ni					
Drug rehabilitation center					
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Notification process					

5. SANITATION HEAL	TH (BAK	(AS) & DRINKING WATER QUALITY CO	NTROL (KMAM)	
Topic	Date	Learning Points	References	Verification
Provision of clean water				
· Rain water collection				
· Tube well				
· GFS				
· Water treatment plant				
Provision of latrine (Program tandas sempurna)				
Water treatment process				
Drinking water quality inspection				
· Sampling				
· Tests conducted				
Waste disposal (solid, liquid- sewage & sullage, toxic-clinical; & radiation)				

6. OCCUPATIONAL H	EALTH			
Topic	Date	Learning Points	References	Verification
Concept of occupational health				
· Type of hazards				
· Management of hazard				
Laws & compensation scheme (SOCSO)	;			
Industrial visit				
Universal precaution				
Training conducted				
Needle prick injury reporting				
Staffs' medical surveillance				

7. FOOD SAFETY & QUALITY CONTROL (FSQC)				
Topic	Date	Learning Points	References	Verification
Principles of FSQC				
What is HACCP?				
Type of food contaminants				
Type of food outstanding				
Participate in food premise's inspection				
Food sampling & the standard violation monitoring				
-				

8. HEALTH ENFORCE	WENT			
Topic	Date	Learning Points	Referen	ces Verification
Summarise laws & regulations in Pub	olic Health			
Akta Makanan 1983				
Peraturan-Peraturan Makanan 1985				
Peraturan-Peraturan Kawalan Hasil Tembakau 1991				
Akta Pemusnahan Serangga Pembawa Penyakit 1974				
Akta Pencegahan dan Pengawalan Penyakit Berjangkit 1988				
Peraturan-Peraturan Pencegahan dan Pengawalan Penyakit Berjangkit (Pengkompaunan Kesalahan-Kesalahan) 1993				
Prevention And Control of Infectious Diseases (Ship) Regulation, 1991 -masih dalam proses pewartaan oleh menteri				
International Health Regulation, 1969				
Quarantine and Prevention of Disease Ordinance 1939				
The Quarantine (Ship) Regulation 1975 (Amendments)				

Guidelines For The Prever	ntion And			
Control of Plague	IIIOII Aliu			
Vector and Rodent Co	introl At			
Airport And Seaport				
9. SCHOOL HEA	LTH PROGE	RAMME		
Topic	Date	Learning Points	References	Verification
The organization of school team	ol health			
Provision of health care				
· Kindergarden				
· Primary school				
· Secondary school				
10. HEALTH EDI	JCATION PR	OGRAMME		
Topic	Date	Learning Points	References	Verification
Healthy Lifestyle Campaigr	1			

Health education material available

#### 11. DENTAL HEALTH PROGRAMME

Topic Date Learning Points

References

Verification

Understand the organization & activities of Dental Health Clinic

#### 12. INTERNATIONAL HEALTH

Topic Date Learning Points References Verification

How the laws & regulations applied: (Refer to Health Enforcement topic above)

Disease & vector control at entry point (seaport & airport)

13. SPECIAL PROGRA	AMMES			
Topic	Date	Learning Points	References	Verification
Orang Asli Health Service				
· Organization of the medical team				
· Service provided				
Riverine Health Service				
· Organization of the medical team				
· Service provided				
HMIS (Health Management Information System) in				
· CDC				
· Tuberculosis				
· Family Health				
· Others (List them)				

## 14. RESEARCH METHODOLOGY

Topic	Date	Learning Points	References	Verification
Research question				
What is/are the research question/s?				
How do you select/obtain the topics?				
Objective of the survey				
Methodology of the survey				
Study design				
Sample size				
Sampling method				
Results Presentation				
Conclusions				
Recommendations				

15. DISTRICT HOSPIT	AL POS	STING		
Topic	Date	Learning Points	References	Verification
Organization of the District Hospital				
Out Patient Service				
In Patient Service				
A&E Service				
Obstetric Service				
Auxiliary Services				
· Laboratory				
· Kitchen				
· Radiology				
· Mortuary				
· Renal dialysis				

EVALUATION	ON
To be filled by the	supervisor
Evaluator's name	:
Title :	
Marks given	
Comments (if any)	) :
Signature	:
Date	:
Official stamp	: