



2021

وزارة الصحة الفلسطينية  
Ministry of Health



## PROJECT PROPOSAL

Improving the laboratory services at Primary Health care  
Centers at Ministry of Health-Gaza Strip



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<b>Project request number (Special for ICD)</b>	<b>136/2021</b>			<b>Date:</b>	<b>31/10/2021</b>		
<b>Project Name</b>	<b>Improving the laboratory services at Primary Health care Centers at Ministry of Health.</b>				<b>Applicant for the project</b>	<b>Ministry of Health</b>	
<b>Project Duration in months</b>	8 Months		<b>Type of project</b>		*	<b>Within the strategic plan</b>	
							<b>Urgent</b>
<b>Project Field</b>		<b>Construction</b>		<b>Rehabilitation</b>		<b>Machines &amp; Equipment</b>	<b>Therapeutic Services</b>
		<b>Consumables &amp; Equipment</b>		<b>Training and Scholarship</b>		<b>Operational Expenses</b>	<b>Others (.....)</b>
<b>Implementation Body</b>	Ministry of Health			<b>Partners</b>		WHO	
<b>Beneficiaries</b>	2 million population in Gaza Strip			<b>Place of implementation</b>		Five Primary Health Care Centers	
<b>Estimated Budget (USD)</b>	<b>454,964 \$</b>						
<b>Summary of project (overview of the project idea and requirements)</b>	<p>The idea of the project depends on providing microbiological laboratory services to five primary health care centers at different governorate (The North, Gaza, Middle, Khanyonis, Rafah) in Gaza Strip with estimated budgets approximately <u>454,964 \$</u>. The Palestinian Ministry of health provides health services to 2 million population in Gaza Strip through 54 primary health care centers. Laboratory equipment &amp; reagents are one of the most essential operational components for providing primary and secondary health services to the patients at Ministry of Health. Annually PHC processed more than 899 thousand laboratory tests (MOH Report 2020). The microbiology laboratory is a surveillance and early warning system for infectious diseases. Clinical microbiology laboratories play a pivotal role in diagnosis and determination of micro-organism and detect the suitable antimicrobial drugs to prevent the complication of diseases and nosocomial infections. So, it requires providing microbiology lab materials, reagents, equipment, antibiotics disc and others, to improve and develop the provided health services for patients at Primary Health Care Centers.</p>						
<b>Project justifications</b>	<ul style="list-style-type: none"> <li>• The microbiology laboratory plays an important role in the surveillance, treatment, control and prevention of nosocomial infections among patients.</li> <li>• An increase in the number of patients at health care centers at the Ministry of Health - Gaza Strip.</li> <li>• Increase nosocomial infection and multidrug resistant organism which will affect the recovery and treatment of patient at MOH.</li> <li>• Poor diagnosis &amp; detection for infectious organisms at Primary Health Centers at MOH-Gaza Strip.</li> <li>• Lack of microbiology instruments, reagents and techniques, which are necessary for diagnosis and determination of the best choice of drug for micro-organism.</li> </ul>						

- Lack of qualified Microbiologist at Primary Health Care Centers-Ministry of Health.
- The Ministry of Health is unable financially to support the Microbiological health services because of the imposed siege on Gaza strip.

**Project Objectives**

**The Main Objective:**  
Improving the quality of provided health care and diagnostic laboratory services to patients at PHCs at Ministry of Health- Gaza Strip.

**Specific Objectives:**

- Rational use of antibiotics by culturing sample collected from patients on specific media at PHC.
- Develop & improve the professional levels of lab. technician in microbiology field at PHC.
- Decrease the complications of infection and multidrug resistance organism for patients.
- Improve the diagnosis and detection of the caused microorganism of infection and disease.
- Provide Five primary health care centers with microbiology instruments, equipment, reagents and antibiotic disc for accurate diagnosis and treatments of infection disease.
- Train the lab technician about the provided microbiology services at PHC-Ministry of Health.

**Expected indicators after implementing the project**

- Decrease the complication of infectious diseases & nosocomial infections for patients at MOH.
- Increase number of professional microbiologists at PHC-MOH.
- Improve the quality of provided microbiology services to the patients at PHC.
- Decline the multidrug resistance micro-organism of infectious sample from patients at MOH.
- Better quality of providing health services to the patients at MOH- Gaza Strip.

**Schedule of the main project implementation phases**

stage	1	2	3	4	5	6	7	8	9	10	11	12
Preparation												
Implementation												
Evaluation & closure												

**Cost of required items for improving Microbiology laboratory services at five primary health care center**

No.	Items for 5 primary Health care center	Total Cost (USD)
1.	List of needed materials, Microbiological tests, reagents & antibiotics disc	345,250
2.	Needed of Instruments and Devices for Microbiology departments	109,714.5
<b>Total Cost \$</b>		<b>454,964</b>

**Sustainability of the project**

- Train and transfer the knowledge & experience of microbiologist at MOH to improve the professional level of Lab Technicians.
- Periodic maintenance of the microbiological devices and instruments at PHC- MOH.

**Project monitoring & evaluation**

- Reports about the efficiency of training & education programs on professional performance of lab technicians and their feedback.
- Reports on the price offer and the bidding according to the schedules, quantities and specifications required of equipment and devices.

	<ul style="list-style-type: none"> <li>• Reports of the received equipment and its conformity and compatibility with the required specifications.</li> </ul>			
<b>Preparation &amp; Supervision</b>	<b>Project designer: Ms. Reem A. Abdelhadi</b>		<b>Supervised: Dr. Hamza Abdeljawad</b>	
<b>Contact</b>	<b>Name:</b>	<b>Dr. Abdellatif El-Hajj</b>	<b>Job title:</b>	<b>Director General of International Cooperation</b>
	<b>E-mail:</b>	<b>icd@moh.gov.ps</b>	<b>Phone with country code:</b>	<b>00970 8 2826325</b>

Appendix

**List of devices and instruments for Microbiology departments at five primary health care Centers**

No	Requirements	Quantity for Center	Total Quantity	Cost per piece \$	Total cost \$
1-	Water bath	1	5	2000	10000
2-	Centrifuge 12 tube	1	5	2000	10000
3-	Vortex mixer	1	5	1000	5000
4-	Lab. Refrigerator	2	10	2000	20000
5-	Safety cabinets class 2	1	5	8000	40000
6-	Co2 incubator	1	5	12000	60000
7-	Incubator	3	15	3000	45000
8-	hot plate & Magnetic mixer	1	5	1500	7500
9-	PH meter	1	5	1500	7500
10-	Dinsitometer	1	5	1000	5000
11-	Binocular Microscope CH2	1	5	1500	7500
12-	Benzin Burner	1	5	100	500
13-	Vertical Autoclave 150 liter	1	5	22000	110000
14-	Air hot Oven	1	5	3000	15000
15-	Automatic pipette ( SET)	3	15	150	2250
<b>Total Cost (USD)</b>					<b>345250 \$</b>

**List of equipment & materials needed to operate five PHC**  
**Ministry of Health**

No	Requirements	Unit	Quantity/mon	Quantity/Year	Unit piece \$	Total cost \$
1-	Gram stain	Kit/4*250ml	2.5	30	30	<b>900</b>
2-	Cover Glass(20*20)	Box/100	25	300	0.7	<b>210</b>
3-	Cup(100ml) Sterile	No	2000	24000	0.1	<b>2640</b>
4-	Parafilm (4inch/125ft)	Roll	2.5	30	23.4	<b>702.9</b>
5-	Petri dishes (90mm,2sectors)	Th	2.5	30	84	<b>2520</b>
6-	Petri dishes (90mm)	Th	2.5	30	85	<b>2550</b>
7-	Slides precleaned	Box/50	50	600	0.6	<b>342.9</b>
8-	Loops (10 μ )	Th	2.5	30	19.4	<b>582.9</b>
9-	Loops (1 μ )	Th	2.5	30	19.4	<b>582.9</b>
10-	Wooden Applicator (with cotton)	Th	5	60	18.3	<b>1097.1</b>
11-	Safty Box	NO	20	240	3	<b>720</b>
12-	Bacitracin	Cartridge/50 Disc	5	60	3	<b>180</b>
13-	Novobiocin	Cartridge/50 Disc	5	60	3	<b>180</b>
14-	Optochin	Cartridge/50 Disc	5	60	3.3	<b>197</b>
15-	Amikacin (30mcg)	Cartridge/50 Disc	15	180	3	<b>540</b>
16-	Amoxycillin (25mcg)	Cartridge/50 Disc	5	60	3	<b>180</b>
17-	Amoxycillin + Clavulanic Acid	Cartridge/50 Disc	15	180	3	<b>540</b>
18-	Ampicillin	Cartridge/50 Disc	20	240	3	<b>720</b>
19-	Colistin	Cartridge/50 Disc	10	120	3	<b>360</b>
20-	Colistin f test	test	250	3000	1	<b>3000</b>
21-	Cefoxitin	Cartridge/50 Disc	10	120	3	<b>360</b>
22-	Tecoplanin	Cartridge/50 Disc	10	120	3	<b>360</b>
23-	Cefotaxime	Cartridge/50 Disc	20	240	3	<b>720</b>

24-	Ceftazidime	Cartridge/50 Disc	15	180	3	<b>540</b>
25-	Ceftazolin (30mcg)	Cartridge/50 Disc	20	240	3	<b>720</b>
26-	Cefuroxime (30mcg)	Cartridge/50 Disc	20	240	3	<b>720</b>
27-	Cefalexin	Cartridge/50 Disc	20	240	3	<b>720</b>
28-	Ceftazolin (30mcg)	Cartridge/50 Disc	15	180	3	<b>540</b>
29-	Chloramphenicol (30mcg)	Cartridge/50 Disc	10	120	3	<b>360</b>
30-	Ciprofloxacin (5mcg)	Cartridge/50 Disc	20	240	3	<b>720</b>
31-	Clindamycin (2 mcg)	Cartridge/50 Disc	5	60	3	<b>180</b>
32-	Cloxacillin (5mcg)	Cartridge/50 Disc	10	120	3	<b>360</b>
33-	Doxyccycline (30mcg)	Cartridge/50 Disc	15	180	3	<b>540</b>
34-	Erythromycin	Cartridge/50 Disc	15	180	3	<b>540</b>
35-	Genamicin (10 mcg)	Cartridge/50 Disc	20	240	3	<b>720</b>
36-	Naldixic Acid	Cartridge/50 Disc	15	180	3	<b>540</b>
37-	Pincillin G	Cartridge/50 Disc	10	120	3	<b>360</b>
38-	Piperacillin - Tazopactam	Cartridge/50 Disc	10	120	3	<b>360</b>
39-	Rifampicin (15mcg)(5mcg)	Cartridge/50 Disc	10	120	3	<b>360</b>
40-	Trimethoprim sulphamethoxazole 23,75/1.25 mcg	Cartridge/50 Disc	20	240	3	<b>720</b>
41-	Vancomycine	Cartridge/50 Disc	10	120	3	<b>360</b>
42-	Vancomycine E test	test	500	6000	1	<b>6000</b>
43-	Levofloxacin E test	test	1000	12000	1	<b>12000</b>
44-	Meropenem (10mcg)	Cartridge/50 Disc	10	120	3	<b>360</b>
45-	Oxidase	Box/50 Test	10	120	12.9	<b>1542.9</b>
46-	Catalase Test	Box/50 Test	5	60	38.3	<b>2297.1</b>
47-	Coagulase test	Kit/100 test	5	60	124.6	<b>7474.3</b>

48-	Staphurex	Kit /50 Test	2.5	30	97.1	<b>2914.3</b>
49-	API 20 E	Box /100 T	2.5	30	608.9	<b>18265.7</b>
50-	Entero Tube	Tube	100	1200	6	<b>7200</b>
51-	Streptococcal grouping	Kit /50 Test	1.25	15	150	<b>2250</b>
52-	Blood Agar Base	500 gm	2.5	30	36.3	<b>1098</b>
53-	MacConkey Agar	500 gm	2.5	30	46.7	<b>1401</b>
54-	Manitol salt agar	500 gm	1.25	15	28	<b>420</b>
55-	Deoxyribonuclease (DNase)	500 gm	1.25	15	135.7	<b>2035.5</b>
56-	Muller Hinton Agar	500 gm	2.5	30	42	<b>630</b>
57-	Nutrient Agar	500 gm	1.25	15	42	<b>630</b>
58-	Sabouraud, Dextrose Agar	500 gm	1.25	15	35	<b>525</b>
59-	Salmonella Shigella Agar ( S.S )	500 gm	1.25	15	42.6	<b>639</b>
60-	Triple sugar iron (TSI) Agar	500 gm	1.25	15	40	<b>600</b>
61-	Gas pack ( anaerobe )	envelop / 10	10	120	20	<b>2400</b>
62-	Aerobic bottle	BTL	300	3600	2.1	<b>7560</b>
63-	Anaerobic bottle	BTL	40	480	2.7	<b>1296</b>
<b>Total Cost (USD)</b>						<b>109714.5 \$</b>

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<b>TOTAL</b>						<b>109714.5</b>