



STRUCTURE OF MICROBIOLOGY DEPARTMENT

1. Name of the Department: Microbiology
2. Name of Head of Department: Dr. (Prof.) Nandini Duggal
3. Location of Microbiology:

Microbiology Department is located in two sections:

- a) Ground floor of the X- Ray building of Dr, Ram Manohar Lohia Hospital.
- b) 6th Floor of PGI Building, Dr Ram Manohar Lohia Hospital.

Microbiology Department is open all 365 days a year.

4. Total no faculty in the Department:

S. No	Name of the Faculty	Designation	Address	Phone Number & Email ID
1.	Dr. Nandini Duggal	Consultant, Professor & Head	C2/252, JanakPuri, New Delhi-110058	Ph:011-25597416 Mb: 9810109119 Email ID: duggalnandini@gmail.com
2.	Dr. R.K. Mahajan	Consultant & Professor	631, Azad Hind CGHS Ltd., Plot No-15, Sector-9, Dwarka, New Delhi-110075	Ph: 011-28080888 Mb:9968307899 Email ID: rks_mahajan@yahoo.co.in
3.	Dr. NirmalJit Kaur	Consultant & Professor	D-1, Naraina Vihar, New Delhi- 110028	Ph: 011-25894550 Mb:9910463661 Email ID:
4.	Dr. Shalini Malhotra	Senior Specialist & Professor	B-26, New Krishna Park, Vikas Puri, New Delhi- 110018	Ph: 011-41582810 Mb: 9810778233 Email ID: drshalinimalhotra@yahoo.com
5.	Dr. Mala Chhabra	Consultant	H-13, Vikaspuri, New Delhi 110018 (P) E10, FF, Kailash Colony, New Delhi 110048 (T)	Ph (off): 011-23404879 Email: malachhabra@yahoo.co.in
5.	Dr. Anuradha	Associate Professor	Flat no 1, Phase -2, Pkt 1, Block C-1B, Sec-18B, Dwarka, New Delhi-78	Ph: Mb:9582011810 Email ID: dranuradha.pgirml@gmail.com

6.	Dr. Arvind Kumar Achra	Assistant Professor	A-4, 70, Paschim Vihar, New Delhi.	Ph (off): 011-23404309 9971506438 Email: arvindachra@gmail.com
6.	Dr. Preeti Madan	Senior Medical officer	214/4, Shivaji Nagar, Gurgaon, Haryana-122001	Ph: 0124-2336700 Mb:9999800270 Email ID: preetimadan07@gmail.com
7.	Dr. Stuti Kansara Arora	Medical Officer	EG-56, Inderpuri, New Delhi-110012	Ph (off): 011-23404309 Email: stutikansra@gmail.com

5. Total no of post Graduates: Five (5) Sanctioned seats

6. Total no of senior residents: Eight (8)

Activity of the department

General Services:

Diagnostic Testing performed in the Department of Microbiology

1 BACTERIOLOG

Y

1.1 Microscopy & Culture

1.1.1 Aerobic Culture & Sensitivity

Pus (Swab & Aspirated Samples)
Sputum/BAL
Throat Swab
Body Fluids & Aspirates (Pleural, Pericardial, Peritoneal, ET, Joint Fluids etc)
CSF
Blood (conventional & automated system)
Urine
Stool
Tissue /Biopsies

1.1.2 Anaerobic Culture

Pus (Deep seated abscesses/ Brain abscess etc)
Body Fluids & Aspirates
Stool
Tissue Biopsies

1.1.3 Mycobacterium Culture, Sensitivity & PCR

ZN Stain for Mycobacterium
Modified ZN Stain for *M. Leprae*
Automated Liquid Culture & Sensitivity [Mycobacteria Growth Indicator Tube (MGIT)]
Real Time PCR
Cartridge Based Nucleic Acid Amplification Test (CBNAAT)

1.2 Serology

1.2.1 Rapid Tests

Bacterial Antigen Detection in CSF (*N.meningitidis*, *S. pneumoniae*, *H. influenzae*, *E.coli*)

Salmonella antibody

Scrub Typhus antibody

1.2.2 Others

Widal Test

VDRL & TPHA

ASO Antibody

Brucella Antibody

2 MYCOLOGY

2.1 Microscopy (KOH, Gram Stain, India Ink) & Culture

Skin Scrapings/Hair/Nail

Urine

Sputum/BAL

Body Fluids

Corneal scrapings/Aqueous humor/Vitreous aspirate

Pus from Various sites (Ear/Eye/Nasal/Brain abscess/Liver abscess etc)

Tissue/Biopsy

2.2 Antifungal Susceptibility testing

Yeast

2.3 Serology

Cryptococcus antigen detection in CSF

Galactomannan Antigen detection for invasive Aspergillosis

3 VIROLOGY

3.1 Serology: Rapid/ELISA

HIV Antibody

Dengue NS 1 Antigen

Dengue Ig M Antibody

Chikungunya Ig M Antibody

Hepatitis A Virus Antibody

Hepatitis B Virus Profile

- Hepatitis B Virus Surface antigen
- Hepatitis B Virus e Antigen
- Hepatitis B Virus e Antibody
- Hepatitis B Virus Core IgM antibody
- Hepatitis B Virus Core Total Antibody

Hepatitis C Virus Antigen/Antibody

Hepatitis E Virus Antibody

Rubella Ig M Antibody

Cytomegalovirus Ig M Antibody

Herpes Simplex I & II Ig M Antibody

Measles Ig M Antibody

Mumps Ig M Antibody

Japanese Encephalitis (JE) Ig M Antibody

3.2 Stool

Rota Virus Antigen

3.3 Viral Load: PCR Quantitative

HIV

Hepatitis B Virus

Hepatitis C Virus

Cytomegalovirus

H1N1 (Nasopharangeal swab/ Respiratory secretions)

4 PARASITOLOGY

4.1 Microscopy

Wet mounts

Stool for Ova/ Cyst/Trophozoites etc
Corneal Scrapings for Acanthamoeba

4.2 Staining

Modified ZN Staining for Cryptosporidium/Microsporidium/Cyclospora

4.3 Serology

Malaria Antigen
Filaria Antigen
Toxoplasma IgM Antibody
Leishmania serology

5 IMMUNOLOGY

CD 4 Counts & Percentages

RA Factor

Anti CCP

ANA

ANA Profile (dsDNA,Nucleosome,histone,SmD1,PCNA,PO(RPP),SS-A/Ro60,SS-A/Ro52,SS-B/La,CENP-B,Sc170,U1-snRNP,AMA-M2,Jo-1,PM-Scl,Mi2,Ku)

Anti Phospholipid Antibody (APLA)

- β 2 Microglobulin Ig M Antibody
- β 2 Microglobulin Ig G Antibody
- Anti Cardiolipin IgM Antibody
- Anti Cardiolipin IgG Antibody

Biomarkers for sepsis

- CRP
- Procalcitonin

Complement (C3, C4)

Immunoglobulins (IgA, IgM, IgG, IgE)

ds DNA

6 INFECTION CONTROL SURVEILLANCE

Air Bacteriology (Critical Areas – OT, ICU etc)

Samples like blood bags & packed sterile objects for sterility testing

Water Culture

Disinfectant Testing

Biological Indicator for Autoclave sterility testing

Suspected Outbreaks

- Environmental Sampling
- HAI Surveillance (Hand/Nasal swabs etc)

7 Special Serology of Immunology sections are available:

1. Complement level C3
2. Complement level C4
3. Immunoglobulin levels of IgA
4. Immunoglobulin levels of IgG
5. Immunoglobulin levels of IgM
6. Antigen Detection for Meningococci, Pneumococci, Group B Streptococcus.
7. Antigen detection for Cryptococcus in CSF

8. IgE ELISA
9. anti CCP ELISA
10. ds DNA ELISA
11. ANA ELISA

NOTICE BOARD

Date, Time and Place for various tests:

TIMINGS OF SAMPLE COLLECTION

A. ROUTINE SAMPLE COLLECTION: -

- In Common Collection Centre: - All routine serology and blood culture for OPD patients
- In Department of Microbiology – all specimens for culture, samples for ELISA, HIV testing*** and CD4 counts
- Monday to Friday – 9.00. A.M to 11.30 A.M.
- Saturday - 9.00 A.M to 10.30 A.M.

- ***** Timings for HIV Testing:**
- Samples from wards/ OPD
- Monday to Friday – 9.00. A.M to 11.30 A.M.
- Saturday – 9:00 A.M. to 11:00 A.M.
- **Voluntary Testing**
- Monday to Friday - 9.00 A.M to 3.30 P.M.
- Saturday – 9:00 A.M. to 11:00 A.M.

B. EMERGENCY SAMPLES: (Department collection): -

- All working days – 9.00 A.M to 7.30 P.M
- Sundays & Holidays – 9.00 A.M to 3.00 P.M

C. SAMPLES FOR TORCH:

- Samples for TORCH ELISA are collected on 2nd & 4th Monday of every month in Dept. of Microbiology.
- Sample collected in Microbiology Department for OPD patients between 9.00 A.M to 11.30 A.M

D. Site of Report Collection:

- All the reports except HIV are uploaded on the website of Hospital Management System (HMS) and can be retrieved by the treating doctor Patients.
- All the reports are sent to the respective wards/ OPDs from where the samples are received.
- Reports of the patients referred by CGHS dispensaries are issued in the Department itself.

E. Expected Time Duration For Reports To be issued:

- Culture reports usually take 48 - 72 hours
- Serology reports are issued one week after collection of samples in routine.

Academics / Training

1. MD Microbiology
2. Internship for B.Sc. / M.Sc. (Biotechnology)
3. Training of M.L.T. Students
4. Teaching of B.Sc. Nursing Students
5. Teaching and Training of Freshly recruited resident doctors on Hospital Infection Control Practices.
6. Re-Orientation classes of all categories of Health Care Workers on Hospital Infection Control Practices.
7. Teaching of Pre Trauma Technician Students.

Support to Public Health Programmes: The department is the sentinel site for National Vector Borne Disease Control Programme (NVBDCP) for surveillance and diagnosis of Dengue & Chikungunya infections. It provides data to Integrated Disease Surveillance Programme (IDSP), and plays an important role during emerging and re-emerging diseases like H1N1, SARS, Ebola & Nipah Virus Diseases etc.

Post Graduate Teaching: The department is involved in postgraduate teaching (MD Microbiology) with intake of 5 students per year. The Microbiology department has 7 faculty, 2 medical officers and 8 senior residents. Quality applied research is undertaken in the department.

Investigation Forms:

फॉर्म नंबर 3 (III)
FORM NO. 3 (III)

डा. राम मनोहर लोहिया अस्पताल, नई दिल्ली
DR. RAM MANOHAR LOHIA HOSPITAL, NEW DELHI
सूक्ष्म जीव विज्ञान विभाग
DEPARTMENT OF MICROBIOLOGY

नाम _____ आयु _____ लिंग _____
NAME _____ AGE _____ SEX _____

पंजीकरण सं. _____ बहिर्ग रेगी विभाग/वार्ड _____ बिस्तर सं. _____ युनिट _____
REGN. No. _____ OPD/WARD _____ BED No. _____ UNIT _____

नमूने का प्रकार _____ नमूने लेने की तारीख और समय _____
NATURE OF SPECIMEN _____ DATE & TIME OF COLLECTION _____

अपेक्षित जांच
INVESTIGATION REQUIRED _____

CLINICAL NOTES—
1. Presenting symptoms with duration _____
2. Previous reports on similar material with date & Lab. No. _____
3. Antibiotic therapy _____
4. Prev. diagnosis _____

INCOMPLETE FORMS WILL NOT BE ACCEPTED SIGNATURE & DESIGNATION _____

FOR LAB USE ONLY

CULTURE AND SENSITIVITY

Organism Grown	Staphylococcus	Streptococcus	Enterococcus	Clostridium	Micrococci	Neisseria	Moraxella	Acinetobacter	Bacteroides	Prevotella	Porphyromonas	Parvulibacterium	Corynebacterium	Mycobacterium	Moraxella	Chlamydia	Legionella	Chlamydia	Mycoplasma	Ureaplasma	Pharyngococcus	Pharyngococcus	
1. _____																							
2. _____																							
3. _____																							

S Sensitive _____ Signature _____
R Resistant _____ Seal _____

DISCONTINUED

DEPARTMENT OF MICROBIOLOGY
DR. RAM MANOHAR LOHIA HOSPITAL
PROFORMA FOR HEPATITIS MARKERS

Name of the Patient : _____ Age/Sex : _____
Ward : _____ Bed No. : _____
OPD/CR. No. : _____ Unit/HOU : _____
Diagnosis : _____ ANC/Dialysis/others : _____
Nature of specimen : _____ Date and time of collection : _____
Investigation required : _____
Clinical history with duration : _____
Yellow discolouration of eyes _____
Abdominal pain _____
Nausea and vomiting _____
Dark urine _____
Loss of appetite _____
Extreme fatigue _____
Weight loss _____
Any history of blood or I.V. fluid transfusion/vaccination etc. _____
Liver function test : _____
Total bilirubin _____
Direct bilirubin _____
Indirect bilirubin _____
Aspartate transaminase (AST) _____
Alanine phosphatase (ALP) _____
Treatment History if any : _____

Signature of Clinician & Stamp _____

NOTE: Blood sample should be atleast 3-4ml.

Patient's Details Form for DENGUE & CHIKINGUNIYA
Dr. R.M.L Hospital (Sadar Pahar Ganj)

Hospital Name
Patient Information

Patient ID*

Patient Classification* Select Patient Classification
 New Relapse Others

Patient First Name*

Patient Last Name

Father's Name*

Mother's Name

Marital Status Select Marital Status
 Divorced Married Unmarried Widow

Spouse's Name

Date of Birth

Age(Years-Months-Days)*

Gender* Male Female Other

Area Type* Select Area Type
 MCD NDMC Delhi Cantt Others

Patient Contact Details

Address Line 1*

Address Line 2

State*

City

Pin

Primary Telephone Number

Secondary Telephone Number

Case Details

Admission Status* IPD OPD

Date of Onset of illness*

Disease Type* Select Disease
 Meningococcal Meningitis Gastroenteritis
 Malaria Dengue
 Cholera Chikungunya

Disease Level Select Disease Level
 Confirmed Probable Suspect

Disease Symptoms* Select Disease Symptoms

Chills & rigors Drowsy
 Excess Sweating Epistaxis
 Fever Haematemesis
 Haemorrhagic Manifestations High Grade Fever
 Hypo Tension Jointache
 Joint Swelling & Pains Loss of Appetite Pain Abdomen
 Malena Muscle & Bone Pain
 Nausea Pain behind Eye
 Petechial Hemorrhage Positive Tourniquet test
 Shaking Chills Severe Headache
 Skin Rash Sweating
 Tachycardia Vomiting
 Others

Undergoing Treatment Yes No

Laboratory Test Select Lab Test Status
 Not Required Not done Done

Lab Test Result

Final Diagnosis Remarks

Notes/Remarks

PGIMER & DR RAM MANOHAR LOHIA HOSPITAL
NEW DELHI-110001
(MICROBIOLOGY DEPARTMENT)

PCR TEST

Name of Patient..... Age / Sex..... Date.....

OPD / CR No..... Ward / OPD..... Bed no.....

Treating Unit..... Cash Memo No..... CGHS No.....

Diagnosis / Clinical Details.....

.....

Previous Reports / Other Relevant Reports.....

Nature of Specimen.....

Name & Stamp of Requesting Doctor

RT-PCR	Interpretation
TB	
HIV	
HCV	
HBV	
CMV	
H1N1	
Others	

Note: The result of the test should be correlated with the patient's history, clinical details and other relevant diagnostic tests.

---- END OF REPORT ----

Signature & Designation

MGIPRRND-2742 RML/2017-50 Pads each of 100 page