

Microbiological Diagnostic Unit, Public Health Laboratory Sample collection and transport guidelines

Record date: 15/02/2024

Request form requirements

1. Patient request forms - A minimum of three identifiers must be provided on the request form (Patient name, date of birth, unique medical/lab record number)
2. Sample/specimen identifiers on samples and request forms must match each other

Sample labelling requirements:

1. Patient specimens - Minimum of two identifiers. (**patient name**, DOB (ideally) and/or unique medical record identifier)
2. Date of sample collection and sample source is essential.
3. Samples must be transported as per: **NPAAC Requirement for the packaging and Transport of pathology specimens and associated materials.**

Test type	Sample type	Minimum amount	Container type	Special Instructions	Transport	Request form
PCR for direct detection of selected bacterial pathogens – <i>N. meningitidis</i> – <i>S. pneumoniae</i> – <i>H. influenzae</i>	CSF Whole blood, aspirates (sterile sites) Joint fluid Pleural fluid Swabs, Tissue Bacterial isolates.	Blood 200µL All other specimens 50 µL	Potassium EDTA or sodium citrate blood CSF in sterile tube	Must arrive before 11am Seal tubes with parafilm (or equivalent) to prevent leakage. Place into a biohazard bag.	4°C Do not freeze	FM119 Human clinical
Bacterial Identification including Risk Group 3 pathogen.	Bacterial culture	Not applicable	Culture on agar plate or slope	Pure culture must be prepared from a single colony on non-selective agar or slope Ensure plate/broth is sealed with parafilm (or equivalent) and placed inside a biohazard bag Ensure associated paperwork is in the external pocket and not placed in with the sample For Risk Group 3 organisms please contact the laboratory to discuss prior to sending	Room temperature	FM119 Human clinical
Antimicrobial resistance genes detection – CPE – mecA – VRE	Culture only	Not applicable	Culture on plate or agar slope	Pure culture must be prepared from a single colony on non-selective agar or slope Ensure plate/broth is sealed with parafilm (or equivalent) and placed inside a biohazard bag Ensure associated paperwork is in the external pocket and not placed in with the sample	Room temperature	FM2458, Human clinical NEPSS if Salmonella

Test type	Sample type	Minimum amount	Container type	Special Instructions	Transport	Request form
Bacterial typing/characterization including: - <i>Burkholderia cepacia complex</i> – <i>E. coli</i> , <i>STEC</i> - <i>Enterococci vanA</i> - <i>Group A streptococci</i> – <i>Listeria</i> – <i>Haemophilus influenzae</i> – <i>Neisseria gonorrhoeae</i> – <i>Neisseria meningitidis</i> – <i>Salmonella</i> – <i>Shigella</i> – <i>Streptococcus pneumoniae</i> – <i>Vibrio cholerae</i> – <i>Campylobacter</i>	Bacterial culture	Not applicable	Culture on agar plate or slope	Pure culture must be prepared from a single colony on non-selective agar or slope. Ensure plate/broth is sealed with parafilm (or equivalent) and placed inside a biohazard bag Ensure associated paperwork is in the external pocket and not placed in with the sample	Room temperature	FM119 Human clinical FM2085 <i>Listeria monocytogenes</i> NEPSS card if <i>Salmonella spp</i>
Heterotrophic Colony Count (HCC)	Cooling tower waters	100ml	Sterile sampling bottle	Ideally, samples should be processed within 6 hours of collection. Record collection time on sample They may be examined up to 24 hours after collection, provided they are kept cool (2-10°C) and in the dark.	Esky with ice bricks	FM117 Water Request form
Legionella	Cooling tower waters	100ml	Sterile sampling bottle	Ideally, samples should be processed within 6 hours of collection. Record collection time on sample They may be examined up to 24 hours after collection, provided they are kept cool (2-10°C) and in the dark.	Esky with ice bricks	FM117 Water Request form
Serology testing Diphtheria /Tetanus Yersinia and Amoebic serology	Serum	1ml	Sterile tube or serum separator tube	Only fresh non-inactivated sera (Hyperlipaemic, haemolytic, microbially contaminated and turbid sera MUST not be submitted)		

Test type	Sample type	Minimum amount	Container type	Special Instructions	Transport	Request form
Enteric pathogen screen and identification	Faeces	5g (minimum 1g)	Faecal container 	Fresh (preferably less than 24h old) No preservative to be added. Store at 4°C if unable to transport immediately	Esky with ice bricks	FM116 Faecal request form
Food pathogen screen and identification	Food	200g (absolute minimum 35g)	Original food container Sterile bag (sealed well to prevent leaks) Sterile container with lid	Store at 4°C if unable to transport immediately	Esky with ice bricks	FM118 Food request form
Water pathogen screen and identification	Waters	250ml (routine testing taps, pools) 1 litre (pathogen testing Salmonella, Campylobacter etc)	Chlorinated waters - Sterile bacteriological sampling bottles, containing sodium thiosulphate to neutralize any chlorine in the water must be used Other waters: Sterile sampling bottle	Ideally, samples should be submitted within 6 hours of collection. Record collection time on sample They may be examined up to 24 hours after collection, provided they are kept cool (2-10°C) and in the dark.	Esky with ice bricks	FM117 Water Request form
SARS-CoV-2 diagnostic samples	Nasopharyngeal swabs, oropharyngeal swabs, nasal, midturbinate, nasal/nasopharyngeal wash/aspirate in VTM/UTM, saline, Liquid Amies or STM	1ml	Screw cap tube		Room temp	Test Tracker e-order or FM2845
SARS-CoV-2 positive samples for WGS	Nasopharyngeal swabs, oropharyngeal swabs, nasal, midturbinate, nasal/nasopharyngeal wash/aspirate in VTM/UTM, saline, Liquid Amies or STM	1ml	Screw cap tube	Please ensure sample tube has been tightly closed to prevent leaking	Room temp	Preferably access the Test Tracker e-order barcode. Alternatively use FM2935 or FM2936 for healthcare workers

Test type	Sample type	Minimum amount	Container type	Special Instructions	Transport	Request form
Strain typing or relatedness (Whole genome sequencing)	Bacterial cultures	Not applicable	Culture on plate or agar slope	Pure culture must be prepared from a single colony on non-selective agar or slope. Ensure plate/broth is sealed with parafilm (or equivalent) and placed inside a biohazard bag Ensure associated paperwork is in the external pocket and not placed in with the sample Phone MDU to discuss requirements before sending	Room temperature	FM2634
	DNA	50ul	Screw cap sterile microfuge tube	Sample must not contain EDTA in the buffer. Phone MDU to discuss requirements before sending	Esky with ice bricks	FM2673