



JOB DESCRIPTION

1. JOB IDENTIFICATION

Job Title: Biomedical Scientist – Specialist Microbiology

Responsible to: Laboratory Manager

Department(s): Laboratory services

Directorate: Clinical Support Services

Last Update: July 2018

2. JOB PURPOSE

The Biomedical Scientist (BMS) specialist in microbiology and along with the Band 7 BMS has the day-to-day responsibility for providing the microbiology service for NHS Shetland

A secondary role is as a multi-skilled BMS to a) participate in the laboratory after hours on-call service & b) provide backfill cover for the discipline specific BMS's.

3. DIMENSIONS (Job Facts and Figures)

The laboratory has a staff establishment of up to six BMS staff and up to five HCSW staff. Professional support is provided by nominated clinical consultant pathologists within NHS Grampian and by the Laboratory Services Clinical Director.

Total annual workload is in the region of 110,000 samples pa growing at a rate of 5-7% pa. Microbiology workload is currently 9000 specimens pa. More specialised testing (eg. Mycobacteria) is sent to Aberdeen Royal Infirmary or to Supra-Regional Service Laboratories as appropriate.

4. ORGANISATIONAL POSITION

Reports directly to the Deputy Laboratory Manager.

Has no direct line management responsibility for staff.

Will co-ordinate Microbiology issues between discipline specific leads in the laboratory and the laboratory manager. Acts as one of the Microbiology liaison persons between the laboratory and other departments in Gilbert Bain Hospital (eg. Infection control, CSD) and NHS Shetland GPs & Health Centres.

Acts as specialist liaison person between the laboratory and external accreditation agencies – NEQAS & CPA.

See attached organisation chart

5. ROLE OF DEPARTMENT

The Laboratory processes and analyses clinical samples in four main areas (Haematology, Clinical Chemistry, Blood Transfusion, Microbiology) in order to aid diagnosis and care of patients within NHS Shetland, both in the hospital and the community.

The microbiology department consists of a CL2 laboratory, a sterilisation area and shared sample reception facility.

The majority of the work is carried out using manual techniques. The daily workload consists of a wide variety of samples, including urine, faeces, blood, tissue and swabs from various body sites. As well as the routine investigation of bacterial infections the department works closely with Public Health services in reporting and monitoring communicable diseases e.g. Food poisoning and Cryptosporidium. Healthcare associated infection (HAI) screens - MRSA and C.difficile are also performed.

The laboratory also receives and refers samples that cannot be analysed in NHS Shetland to regional and supra-regional laboratories e.g. Mycobacteriology.

6. KEY RESULT AREAS

As Microbiology BMS specialist (80% of role)

1. As the Biomedical Scientist (BMS) specialist in microbiology you will have the day-to-day responsibility for providing the Microbiology service for NHS Shetland.
2. Plan and prioritise your own and support staff workload according to local protocols.
3. Process microbiological specimens
4. Provide specialist advice on Microbiology to clinicians on type of specimens, method of collection and appropriateness of tests.
5. Provide specialist advice and training to junior scientific and other HCSW staff as part of the in-house CPD programme.
6. Responsible for testing and maintenance of specialist and expensive equipment for use of self and others.
7. Stock control and ordering of microbiology supplies.
8. Will implement, and provide suggestions for improvements to Standard Operating Procedures (SOPs) and policies within Microbiology.
9. Ensure all quality control procedures are carried out and report any non-compliance to Quality Manager.
10. Ensure that all laboratory waste is processed as per local policy and that the laboratory autoclave is operational.
11. Ensure that all Communicable Disease isolates are notified e.g. enteric pathogens, MRSA etc.
12. Will have a key role as a member of the Laboratory Management Team in producing the following, as required by ISO 15189 & UK Accreditation Scheme (UKAS):
 - Setting Annual Quality Objectives
 - Programmed Audit Schedule
 - Annual Management review
 - Maintaining procedures for document control
 - Ensure attendance at laboratory management and staff meetings

As Biomedical Scientist (20% of role)

1. Will be required to deputise for other department staff during sickness, leave and other periods of absence.
2. Participate in the multidisciplinary after hours on-call service.
3. Maintain a CPD portfolio and HCPC registration
4. Prepare and maintain analytical equipment so that is ready for use by self and other staff.

7a. EQUIPMENT AND MACHINERY

1. As a senior BMS, operate and have an advanced level of understanding of complex and intricate/complex analytical instruments that require maintenance, calibration, internal & external controls.
2. Maintain logs for training, competency, maintenance, calibration and quality controls for all Microbiology equipment.
3. Use of everyday office & communication equipment – PCs, fax, email printers etc.

7b. SYSTEMS

1. Expert knowledge of LIMS and document control software.
2. Training of all staff in Microbiology systems – automated ID & susceptibility (Vitek2) & blood culture analysers (mini-Vidas).

8. ASSIGNMENT AND REVIEW OF WORK

The Microbiology specialist is accountable to the departmental (Laboratory) manager but will be delegated a large degree of autonomy in the performance of their duties. The post holder will be expected to anticipate, plan and correct problems without direct supervision/intervention.

The post holder is expected to meet regularly with the Laboratory Services Clinical Director and in addition will be subject to formal appraisal not less than annually.

9. DECISIONS AND JUDGEMENTS

As the BMS Specialist – Microbiology the post holder is responsible for:

- Communicating with colleagues and clinicians about laboratory investigations required.
- Answering queries on test results and giving advice on their interpretation.
- Providing and receiving complex and/or sensitive information related to patient clinical condition and test results. This will include patients with sexually transmitted and communicable diseases, and HAI e.g. MRSA, C.Difficile etc
- Providing information related to sample requirements for specialised testing.
- Elevation of non-conformity issues to appropriate level for resolution, eg Risk Management & Clinical Governance related issues.
- Defining and championing innovative approaches to service improvement.

- In emergency situations communicating between external agencies (e.g. National Blood services Air ambulance) and A&E or theatre to coordinate blood supplies while carrying out laboratory testing at the same time.

As a BMS the post holder is responsible for:

- Use of clinical judgement in interpretation of test results. Advice to service users must be within limits of level of knowledge, complexity of tests, clinical details & test results.
- The post holder is expected to use a high degree of knowledge and skills in order to make accurate decisions on test results prior to validation/authorisation, and to suggest further reflex testing if required.

10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB

- Meeting regulatory and other accreditation standards including and the United Kingdom Accreditation Scheme (UKAS).
- Working within budgetary and time constraints to maintain an effective QMS.
- Making independent decisions about microbiology issues, often in highly complex, contentious and multifaceted environments.
- Working with potentially hazardous and infectious clinical samples using personal protective clothing and equipment.
- Working under pressure to meet immediate clinical needs of patients and users eg. emergency demand for transfusion products, on-call, after hours.

11. COMMUNICATIONS AND RELATIONSHIPS

The post-holder will communicate directly with:

- Laboratory Services Clinical Director and Laboratory Manager.
- NHS Shetland clinical staff regarding test results and sample selection.
- External agencies undertaking business communications with the department.
- Laboratory colleagues.
- Involved with strategic planning with Clinical Director and Laboratory Management meetings and Laboratory Annual Review to decide laboratory strategy.
- Members of the public.

The post holder must:

- Maintain a professional relationship and communicate effectively with all members of staff and external agencies.
- Establish and maintain communication with various individuals and groups on highly complex and potentially stressful topics in a range of situations.
- Adhere to the strict rules governing the maintenance of confidentiality and data protection.
- Adhere to departmental and Health Board policies and procedures.

12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB

- Requirement to multi-task.
- Requirement to work autonomously, while dealing with highly complex, multi-stranded and often contentious issues.
- Manual handling of stocks and delivery of goods in accordance with Health Board manual handling training.
- Contact with potentially hazardous or infectious reagents and waste materials.
- Need for good hand-eye co-ordination.
- Working intermittently at computer workstations for prolonged periods.
- Need for attention to detail regarding the labelling of samples and forms, and checking the accuracy of patient details.
- Participation in weekend and out-of-hours work.
- Intense concentration is required while performing microscopy on clinical samples.
- A multidisciplinary on-call requirement having already completed a full day shift.
- Requirement to communicate with members of the public, and staff about issues that may be unwelcome or contentious and invoke a degree of resistance and antagonism.
- Service related issues may be technical, staffing training or requests for advice and support from other departments.

13. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB

EXPERIENCE **ESSENTIAL**

- Substantial post-qualification experience in a routine diagnostic microbiology department
- Experience of CPA accreditation process

DESIRABLE

- Demonstrable experience of specialist microbiology – eg. Fungi, parasitology etc.
- Experience of laboratory supervision and/or training
- Practical experience of working in a multi-disciplinary laboratory.
- Demonstrable experience of infectious disease serology

QUALIFICATIONS, TRAINING, RESEARCH, PUBLICATIONS, ESSENTIAL

ESSENTIAL

- HCPC Registered.
- Honours degree or equivalent experience suitable for registration as a
- Associate of the Institute of Biomedical Sciences (AIBMS).
- Evidence of advanced training, i.e. CPD portfolio.

DESIRABLE

- Experience suitable for registration as a
- Fellow of the Institute of Biomedical Sciences (FIBMS).
- Specialist qualifications in microbiology or public health
- Other computing or management qualifications

KNOWLEDGE AND SKILLS

ESSENTIAL

- Expert knowledge of routine diagnostic procedures
- Demonstrable ability to produce working documents – eg SOPs
- Able to use and produce Word documents, Spreadsheets and use of databases.

DESIRABLE

- Previous experience of Clinisys “Labcentre” laboratory information system
- Previous experience of document control software

DISPOSITION

ESSENTIAL

- Ability to maintain excellent communication skills in a busy environment, both in person over the telephone, by e-mail and Fax.
- Demonstrable negotiation skills
- Ability to work autonomously and to tight deadlines.

DESIRABLE

- Demonstrable leadership skills

OTHER

ESSENTIAL

- Ability to deal with medical confidential information in the context of the data protection act.
- Must participate in after- hours rota. (Training will be provided)
- Full driving licence or ability to make suitable arrangements to attend promptly for on-call purposes.

14. JOB DESCRIPTION AGREEMENT

A separate job description will need to be signed off by each jobholder to whom the job description applies.

Job Holder's Signature:

Head of Department Signature:

Date:

Date:

