



Job Description

Job title:	Senior Scientist
Group/Division:	Clinical and Public Health Group, BSHSH Division
Pay grade/band:	SEO
Responsible to:	Principal Scientist
Location:	Colindale
Hours per week:	37.5 hours per week
Job type: (i.e. Fixed Term/Permanent)	Permanent

INTRODUCTION

At the United Kingdom Health Security Agency (UKHSA) our mission is to provide health security for the nation by protecting from infectious disease and external hazards. We are a trusted source of advice to government and to the public, focusing on reducing inequalities in the way different communities experience and are impacted by infectious disease, environmental hazards, and other threats to health.

Our mission is challenging, innovative and in the spotlight. We will work to ensure our people have the diverse skills, experiences and backgrounds we need to thrive, that our employees are representative of the communities we serve and feel valued and enabled to play their part in delivering our work.

Creating our working culture is an ongoing process which we are developing by listening and learning together, hearing and acting upon diverse voices and opinions to develop a common sense of identity and effective ways of working.

Blood Safety, Hepatitis, STI & HIV Division

The Blood Safety, Hepatitis, STI and HIV (BSHSH) Division is the national centre for surveillance of hepatitis, HIV and other sexually transmitted infections (STIs) in England. It is within the Public Health Programmes (PHP) Directorate of the Clinical and Public Health (CPH) Group and is based mainly in Colindale, north London. The Division consists of around 100 permanent and project-funded medical, scientific, technical and administrative staff including epidemiologists, public health specialists, microbiologists, virologists, data managers and statisticians. The Division works closely with other Divisions, particularly Immunisation and Vaccine-Preventable Diseases, Health Equity, Healthcare Associated Infections and Antimicrobial Resistance and Reference and Specialist Microbiology Services and with the Analytics and Data Sciences Directorate and Health Protection Operations. The Division also works in partnership with both national and regional teams in the Office



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for Health Improvement and Disparities (OHID), NHS England and NHS Improvement and NHSBT. The Division is also closely involved with the work of the NIHR-funded Health Protection Research Units, which are collaborative ventures involving UKHSA and academia.

The BSHSH Division aims to:

- Describe trends in the incidence and prevalence of hepatitis, STIs and HIV, especially in important behavioural population sub-groups;
- Describe trends in the incidence and prevalence of all infections transmissible through blood, tissue and organ donations;
- Provide national reference and specialist microbiology and virology services, for public health, clinical and diagnostic purposes;
- Monitor the outputs and effectiveness of hepatitis, STI and HIV prevention activities and programmes and support development of national policy;
- Provide information for local needs assessment, service commissioning and evaluation, and to guide prevention activities aimed at reducing risk behaviours and interrupting infection transmission, including through blood, organ and tissue donation;
- Investigate national and uncommon outbreaks, respond to international health alerts, and provide advice on the risks posed;
- Train those working in blood safety and in hepatitis, STI and HIV surveillance, monitoring and prevention,
- Lead and contribute to research in hepatitis, STI and HIV epidemiology, diagnostics, and infection prevention and control.

JOB SUMMARY

In general, the postholder will be expected to lead on the implementation and management of one or more surveillance systems within the division. This post will require project management and management of staff. The postholder will lead on behalf of the division on developing and designing datasets, managing the collation and validation of data, and the timely production of outputs (e.g. reports and articles). The postholder will be expected to lead on the analysis of datasets, to provide advice and guidance on specialist aspects of the analyses, to interpret and prepare scientific reports and articles of the results and to undertake further research. The postholder will contribute to the teaching activities of the division.

In general, the postholder will be expected to cope with multiple and changing demands, and to meet tight deadlines. The postholder will be expected to have a high level of intellectual rigour and to advise and make recommendations regarding the development of strategy and implementation of systems. A high level of tact and diplomacy is required and an ability to understand other cultures to enable effective working across organisational boundaries and influencing without authority.

MAIN DUTIES AND RESPONSIBILITIES

Surveillance

- Develop, manage and maintain the surveillance databases.
- Manage existing national surveillance systems and co-ordinate the development of new surveillance systems for hepatitis, HIV and/or STIs and to supervise and advise junior



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scientific and administrative staff in the maintenance and development of integrated or enhanced surveillance datasets.

- Conduct complex statistical analyses of data drawn from a variety of surveillance sources in response to ad hoc enquiries from Government agencies, international agencies (ECDC, WHO), public health practitioners, academics and members of the public.
- Advise scientific and administrative staff conducting routine analyses of surveillance datasets for standardised outputs and ad hoc enquiries.
- Supervise junior scientific colleagues and the administrative team in the production of surveillance reports and publications.
- Help coordinate the activities of scientists in partner institutes involved in collaborative surveillance programmes.
- Provide technical advice and assistance to public health practitioners on the design, maintenance, analysis and interpretation of surveillance databases.
- Assist in the design and development of new surveillance and data management systems in response to developments in the application of microbiological typing methods including contributing to the drafting of Standard Operating Procedures.
- Write or contribute to the drafting of scientific papers for publication in peer reviewed journals and detailed reports for UKHSA or Government departments.

Outbreak Investigation

- Manage the technical and analytical aspects of outbreak investigations, under the supervision of the Senior/Consultant lead, by:
 - designing outbreak databases;
 - liaising with relevant specialists to collect epidemiological data;
 - coordinating and advising incident teams;
 - interviewing clinicians and patients to collect clinical and risk factor data during incidents
 - overseeing data entry and ensuring quality control of databases;
 - collating and interpreting epidemiological and microbiological data drawn from a variety of sources;
 - conducting complex statistical analyses of datasets;
 - providing statistical analyses for government agencies, health protection units and others;
 - writing briefing notes and situation reports;
 - presenting epidemiological data to Incident Management Teams;
 - contributing to the production of outbreak reports and subsequent publications.

Research

- Contribute to the development of research proposals
- Coordinate the collection and collation of data from collaborators based in specialist laboratories and other institutions throughout the UK.
- Conduct statistical analyses of epidemiological and microbiological data for grant funded research projects and UKHSA programmes.
- Provide complex statistical analyses of surveillance/research datasets to academic units and other agencies involved in collaborative epidemiological and microbiological research studies under the guidance of the project leader.
- Contribute to the process of writing scientific papers for publication in peer reviewed journals and project reports to funding bodies.



Publications and presentations

- Supervise scientific and administrative staff in the production of departmental outputs and editorial material for the Health Protection Report.
- Produce surveillance newsletters and/or reports.
- Present epidemiological findings at national and international meetings and conferences.
- Regularly update the BSHSH web-pages with data and associated information.

Teaching and Training

- Develop and present lectures and teaching materials on the epidemiology and surveillance of hepatitis, HIV and/or STIs for UKHSA, university postgraduate and professional development training programmes.
- Contribute to the training for new members of staff on the epidemiology and surveillance of hepatitis, HIV and STIs.

Other

The above is only an outline of the tasks, responsibilities and outcomes required of the role. You will carry out any other duties as may reasonably be required. The job description and person specification may be reviewed on an ongoing basis in accordance with the changing needs of the organisation.

Professional Development

Identify, discuss and action own professional performance and training / development needs with your line manager through appraisal / individual development plan. Attend internal and external training events. Participate in all mandatory training as required (e.g. information governance training).

Key Working Relationships

The post holder will develop working relationships and communicate regularly with a wide range of individuals, clinical and non-clinical, internal and external to UKHSA. This will include:

- a) Medical, scientific, ICT/bioinformatics and administrative colleagues within BSHSH and the CPH Group;
- b) Staff in other divisions of UKHSA, especially colleagues in Laboratory Services;
- c) Colleagues in the UKHSA Statistics Unit, Field Services, Local Health Protection Teams and the Communications Dept;
- d) Patient networks and charities;
- e) Department of Health and Social Care;
- f) British Association for Sexual Health and HIV (BASHH)
- g) British HIV Association
- h) European Centre for Disease Control and Prevention (ECDC) and European Food Safety Authority (EFSA);



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- i) Local government;
- j) Devolved administrations (Public Health Scotland, Public Health Wales);
- k) Other clinical, public health, scientific and academic staff in NHS Trusts, national, regional and local institutions within and outside the UK;
- l) members of the public.



Person specification

Description	Essential	Desirable	Assessment
Qualifications			
First degree in a science subject	✓		A/I
Higher degree in Epidemiology, Public Health or an allied subject, or equivalent	✓		A/I
Knowledge and experience			
Postgraduate work/study in public health, epidemiology or an allied subject	✓		A/I
Interpreting and evaluating epidemiological data, using Access/ SQL databases, spreadsheets, statistical and graphics packages to an advanced level	✓		A/I/T
Statistical analysis of large and complex epidemiological datasets	✓		A/I/T
Managing epidemiological studies and outbreak investigation	✓		A/I
Skills and capabilities			
Communicate ideas and methods clearly and succinctly to include excellent oral and experience of writing scientific papers and/or project reports	✓		A/I/T
Identify and solve day-to-day practical problems	✓		A/I
Ability to work on several separate tasks at the same time, whilst keeping to agreed deadlines	✓		A/I
Experience of creating and giving presentations to a varied group of internal and external stakeholders and an ability to liaise with a range of health professionals and scientific specialists		✓	A/I
Ability to analyse very complex issues where material is conflicting and drawn from multiple sources and to act upon incomplete information, using experience to make inferences and decision making	✓		A/I
Equality and diversity			
An understanding of and commitment to equality of opportunity and good working relationships.	✓		I
*Assessment will take place with reference to the following information A = Application form I = Interview C = Certificate T = Test			



As a civil servant your performance and appraisal will be assessed against the civil service core competencies below:

Strategic cluster – setting direction:	People cluster – engaging people:	Performance cluster – delivering results:
1. Seeing the big picture 2. Changing and improving 3. Making effective decisions	1. Leading and communicating 2. Collaborating and partnering 3. Building capability for all	1. Achieving commercial outcomes 2. Delivering value for money 3. Managing a quality service 4. Delivering at pace

ADDITIONAL INFORMATION

In addition to the job specific requirements above this role will require adherence to the following:

Performance Development and Appraisal

All employees are required to partake in a monthly and quarterly review of their work.

Code of conduct and revalidation process for professionally qualified employee groups

All employees are required to work in accordance with their professional group's code of conduct and revalidation process as appropriate and relevant to their role (e.g. NMC, GMC, Department of Health Code of Conduct for Senior Managers, CIPD, etc).

Information governance

UKHSA processes (collects, uses and shares) large volumes of data and information of different types and forms, including personal data about identifiable individuals.

Information governance (IG) is about managing the risks to the confidentiality, integrity and availability of all this data and information.

UKHSA data and information must be managed in accordance with the requirements of data protection and related law, and best practice standards and guidance. As an employee, you are responsible for:

- 1) protecting the confidentiality of UKHSA data and information by:
 - complying with the Data Protection Act 2018 (incorporating the General Data Protection Regulation)
 - complying with the common law duty of confidentiality, the Caldicott Principles and the NHS Code of Practice on Confidentiality when processing personal data
 - complying with the policies, procedures and guidance in place to protect the confidentiality of UKHSA data and information, for example by:
 - only accessing the UKHSA data and information you have approval to use for your role, and not sharing this access to UKHSA data and information with anyone else



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- not attempting to circumvent the managerial, procedural and technical security controls in place to protect UKHSA data and information
 - not processing UKHSA personal data outside UKHSA office sites without approval
- 2) complying with the policies, procedures and guidance in place to protect the integrity (in other words, the accuracy and completeness) of UKHSA data and information, for example by:
- only altering UKHSA data and information if you have approval to do so as part of your role
- 3) complying with the policies, procedures and guidance in place to protect the availability of UKHSA data and information, for example by:
- complying with the policies, procedures and guidance on the secure and acceptable use of UKHSA ICT systems and equipment
- 4) complying with the law and UKHSA policies, procedures and guidance on the management of records, including the proper use of the Government Security Classifications.
- 5) reporting incidents affecting the confidentiality, integrity and availability UKHSA data and information, for example, unauthorised access to UKHSA data and information, or the loss or compromise of UKHSA ICT systems or equipment
- 6) completing the annual information governance training appropriate to your role

UKHSA reserves the right to monitor your access to UKHSA data and information, including your use of UKHSA ICT systems and equipment, in order to assure your compliance with data protection and related law, and with the UKHSA policies, procedures and guidance in place to support this.

Failure to comply with these requirements may result in disciplinary action being taken, and sanctions being applied up to and including your dismissal.

You are personally accountable for deliberate or avoidable data protection breaches. Failure to comply with the Data Protection Act 2018 may result in you being reported by UKHSA to the Information Commissioner's Office, which may lead to criminal prosecution.

Conflict of interests

UKHSA employees must not use their official position, or any information obtained through their role in UKHSA to further their private interests or the interests of others. This means any circumstances where there is, or could be perceived to be, a conflict of interest between the individual's role in UKHSA and any other business or private capacity interests that they are involved with, where the other interests could influence how an individual carries out their role.

In accordance with UKHSA Code of Conduct Policy and based on the requirements set out in the [Civil Service Code](#), the [Civil Service Management Code](#), you must declare all Outside Interests, both before commencing in-post and within ten working days of any addition or change. Outside



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interests, be they business, hobby or trade, must not compromise or conflict with the appointment and role in UKHSA.

A key test of whether an Outside Interest could be perceived to be a conflict of interest is where there is a risk that a fair-minded outside observer, acting reasonably, would conclude that there is a real possibility of bias.

A Conflict of Interest Declaration Form must be completed when joining the department and If there is the possibility of a conflict of interest whilst in-post. You must also inform your Line Manager whenever you make a declaration/register an interest.

In addition, the Policy requires you to declare all situations where you or a close relative or associate has a controlling interest in a business (such as a private company, public or voluntary organisation) or in any activity which may compete for any contract to supply goods or services to UKHSA. You must register such interests with UKHSA, either on appointment or within ten working days of whenever such interests are acquired.

You should not engage in these activities or outside employment without the written consent of UKHSA, which will not be withheld unreasonably. It is your responsibility to ensure that you are not placed in a position that may give rise to a conflict between your private interests and your UKHSA duties and that these do not bring, or potentially bring, UKHSA into disrepute.

Diversity

An important part of our mission at the UKHSA is to help reduce health inequalities across the UK. The Covid-19 pandemic highlighted how certain groups are impacted negatively by health inequality, and we want to ensure we learn from these challenges. To do that effectively we need to continue building a talented workforce that represents the diversity of our population. Our ethos is to be an inclusive organisation for all our employees and stakeholders, where differences drive innovative solutions to meet the needs of our workforce and wider communities. This in turn produces more accountable and trusted public services and better decisions; better because they are more attuned to the needs and interests of all our communities, helping to address inequality. We are committed to ensuring our culture and ways of working allow all of our people to thrive at work.



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Emergency Response

Given the nature of the work of UKHSA, as a Category 1 responder, you may be required in an emergency, if deemed a necessity, to redeploy to another role at short notice. You may also be required to work at any other location, within reasonable travelling distance of your permanent home address, in line with the provisions set out in your contract of employment.

Health and safety

You must co-operate with management in discharging its responsibilities under the Health and Safety at Work Act 1974 and take reasonable health and safety of yourself and others and ensure the agreed safety procedures are carried out to maintain a safe environment for service users, employees and visitors.

Centre/divisional directors - are responsible for coordinating health and safety activities in their centres/divisions and will determine the necessary management structure and arrangements. Directors will ensure that their actions and decisions at work reinforce the requirements of UKHSA's health and safety policy and arrangements.

Managers - are responsible for implementing the organisation's health and safety policies and arrangements and for ensuring that risk assessments, safe systems of work, control measures and employee training are up to date and effective. Managers will inspect premises, ensure accidents and incidents are reported/investigated and assist in auditing health and safety management arrangements.

All employees must comply with any health and safety training: report all accidents, incidents, illnesses and untoward occurrences to line management without undue delay and must not interfere with or misuse anything provided in the interest of the health, safety and welfare of other employees.

Risk management

All employees have a responsibility to report all clinical and non-clinical accidents or incidents promptly and, when requested, to co-operate with any investigation undertaken.

Safeguarding Children and Vulnerable Adults and Disclosure and Barring Service (DBS) (If applicable)

If the post holder is required to have contact with vulnerable adults or persons under the age of 18 then the post holder will be subject to a criminal record check from the Disclosure and Barring Service prior to the appointment being confirmed. The disclosure will include details of cautions, reprimands, and final warnings, as well as convictions if applicable. All employees must be familiar with and adhere to the UKHSA child protection and safeguarding adult and children policies and procedures. Employees must comply with all statutory legislation and guidance relating to safeguarding children and vulnerable adults. All employees are required to attend child protection and safeguarding adults awareness training, additional training and supervision regarding child protection relevant to their position and role.