



UK Health
Security
Agency

Job Description

Job title	Senior Scientist
Group	Health Protection Operations
Division/Directorate	Field Service/Field Services
Pay band	Civil Service SEO Grade
Base/location	2 Rivergate, Bristol, BS1 6EH With regular travel within the geographical area of responsibility and travel elsewhere/nationally as maybe required by the post
Hours per week	37.5 PW
Job type	Permanent
On call required	No
Security level	BPSS

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.

FIELD SERVICES DIRECTORATE

The Field Services Directorate (FSD) was established to provide a national comprehensive service which is geographically dispersed and integrates epidemiological, microbiological, infectious diseases and data sciences capacity and skills delivering surveillance and outbreak investigations consistently of the highest quality. FSD provides an effector arm for UKHSA, supporting the translation of evidence into practice as well as having a role in strengthening surveillance through closer links with the NHS and other partners. It also provides valuable links to academic centres. FSD also provides effective leadership and coordination of the UKHSA applied epidemiology training function

JOB SUMMARY

The Senior Scientist works closely with senior epidemiologist colleagues to provide epidemiological and data management support across a number of topic areas; and to the epidemiological investigation of incidents and outbreaks of infectious diseases and routine, supporting local Health Protection Teams and in collaboration with other partners. This will include supporting and managing the technical and analytical aspects of epidemiological outbreak investigations and supporting a team in carrying out these tasks. The interface with local, regional and national colleagues, as well as with external stakeholders, will be an important feature of this role.

MAIN DUTIES AND RESPONSIBILITIES

Specific duties of the role may vary depending on the site and teams/functions.

Surveillance and Data Analysis

1. Identify surveillance needs within given lead areas, create surveillance system specifications, conduct complex statistical analyses and interpret surveillance data, making appropriate recommendations, develop automated routines and solutions and supervise / assure on the preparation, quality and delivery of routine and ad hoc surveillance reports.
2. Respond to complex or sensitive data requests.

Outbreak Support and Epidemiological Investigations

3. Where appropriate, lead and manage the technical and analytical (including data management) aspects of epidemiological outbreak investigations, including the supervision of the investigation of exceedances, e.g. write protocol of analytical studies, contribute to the production of outbreak control team reports and train interviewers.

Statistical and Software Skills

4. Apply a range of common statistical tests and algorithms including time trend analysis and translate statistical processes into automated solutions where appropriate
5. Use common statistical/database/mapping/web tools such as Stata, R, ArcGIS, network analysis, SQL and SharePoint in routine reports, surveillance activities and the development of solutions and undertake complex analytical and programming tasks using common and specialist software packages to support data extractions, analysis and validation

Audit, Quality and Governance

6. Advise on quality and governance issues including information security for all aspects of Field Service work, evaluating existing systems and acute response to incidents and outbreak, and use to improve standards and consistency across the team.
7. Contribute to the Field Service quality programme such as through audit and be responsible for the quality of data collected, stored and extracted and transferred.

Research and project management

8. Support/lead and facilitate the delivery of projects using a framework to ensure they are well planned, efficiently implemented, predetermined benefits are realised and associated risks mitigated
9. Project manage research studies, analysing datasets with appropriate methodology to answer research questions, supported by the systematic review of literature and with knowledge of how to develop a grant proposal, and apply for ethical approval.
10. Present at scientific conferences, programme area meetings and other for a and publish and present scientific papers on public health surveillance, outbreaks and infectious disease control in collaboration with health, public health, academic and other partners

Management and Leadership

11. Contribute to specified quality improvement and governance initiatives as agreed.
12. Actively engage in meetings with internal and external colleagues, identify potential problems and seek to resolve and undertake a lead role for a specific topic or function area, on behalf of the service as a whole
13. Support defined areas of work as agreed with line manager as well as the development of policies and protocols for use within the team/departments
14. Undertake line management responsibilities as agreed, contribute to the supervision and training of junior staff allocated to the team and act as a role model adhering to UKHSA Values and Behaviours

15. Contribute to teaching/training programmes and activities (including to the development of teaching material and courses) on surveillance, epidemiology information science, data management, information governance and quality and support ongoing training activities within the team and Service.
16. Deal with at times, challenging and/or conflicting subject matter problems in day to day workload referring/escalating to line management as appropriate.

PERSONAL AND PROFESSIONAL DEVELOPMENT

- The post holder will identify, discuss and action own professional performance and training / development needs with their line manager through appraisal / individual development plan. Attending internal / external training events.
- To participate in all mandatory training as required, i.e. safeguarding, fire safety, information governance and all other mandatory training.

OTHER DUTIES

- 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 by the directorate.
- The job description and person specification may be reviewed on an ongoing basis in accordance with the changing needs of the organization.

COMMUNICATION AND KEY WORKING RELATIONSHIPS

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

- | | |
|---|--|
| <ul style="list-style-type: none"> • UKHSA NICC Cells • Field Service and Field Services staff • Health Protection Ops Group staff including: <ul style="list-style-type: none"> ▪ PAN Regional ▪ Emergency Preparedness and Response • Science Group staff including: <ul style="list-style-type: none"> ▪ Centre for Radiation, Chemicals and Environmental Hazards • ICT and Digital staff • NHS England • NHS Improvement | <ul style="list-style-type: none"> • NHS Digital • Office for Health Improvement and Disparities staff (OHID) • Test and Trace Programme including Joint Biosecurity Centre • Scientific and academic staff in national, regional and local institutions • Agencies contributing to environmental hazards surveillance and members of the public. |
|---|--|

Person Specification					
Assessment will take place with reference to the following information					
A - Application	I - Interview	C – Proof of qualification / membership of professional body	T - Test		
Description			Essential	Desirable	Assessment
EDUCATION & QUALIFICATIONS					
1. Educated to degree level in relevant subject or equivalent level of experience of working at a similar level in specialist area (in the maintenance, analysis of data)			√		A
2. MSc in Epidemiology, public health or allied discipline or equivalent level of experience/education			√		A
3. Completion of the Field Epidemiology Training Programme or equivalent training and experience			√		A
KNOWLEDGE AND EXPERIENCE					
4. Knowledge of principles and practice of surveillance, including data management, data transmission, data security, data quality, data analysis including descriptive statistics and graphics and data reporting			√		A/I
5. Experience of interpreting and evaluating epidemiological data, sensitive health data analyses and performing analytical epidemiology			√		A/I
6. Demonstrable experience of public health, health protection or epidemiology			√		A/I
7. Experience of research activities with one or more first author publications in peer reviewed journals				√	A/I
8. Knowledge and experience of common statistical tests, modelling and analyses and interpret results appropriately, including for research purposes			√		A/I
9. Experience of using epidemiological and statistical software packages			√		A/I
10. Experience of teaching epidemiology and/or surveillance				√	A/I
11. Knowledge of health and social care environment, and roles and responsibilities within it including information flows in the NHS and allied services			√		A/I
12. Experience of effective line management			√		A/I
SKILLS AND CAPABILITIES					
13. Ability to build and maintain effective relationships with co-workers and key stakeholders			√		A/I
14. Understanding of information governance including data protection and confidentiality requirements			√		A/I
15. Excellent oral and written communication skills with proven presentation and scientific report writing skills			√		A/I
16. Understand of information governance including data protection and confidentiality requirements			√		A/I
17. Proficient in common statistical/database/mapping tools such as STATA, R, GIS, network analysis, SQL, etc.			√		A/I
18. Able to work under own initiative, seek out new information and new ways to develop yourself as well as to respond to sudden unexpected demands whilst maintaining a professional calm and efficient manner			√		A/I
EQUALITY AND DIVERSITY					
19. An understanding of and commitment to equality of opportunity and good working relationships			√		I

Civil Service Competency Framework 2019

As a civil servant your performance and appraisal will be assessed against the civil service core competencies or success profile elements detailed below:

Strategic cluster – setting direction:	People cluster – engaging people:	Performance cluster – delivering results:
1. Changing and improving	1. Leading and communicating 2. Collaborating and partnering 3. Building capability for all	1. 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. The process is described here: [Personal development - Performance development and appraisals \(ukhsa.gov.uk\)](https://www.ukhsa.gov.uk/personal-development-performance-development-and-appraisals)

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
 - 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, unauthorized 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 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.

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.

Group/divisional directors - are responsible for coordinating health and safety activities in their 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.