

PUBLIC HEALTH WALES NHS TRUST

JOB DESCRIPTION

JOB DETAILS

Job Title:	Environmental Public Health Scientist
Band:	7
Hours:	37.5 hours per week
Department:	Public Health Services
Division:	Health Protection
Base:	Capital Quarter 2, Tyndall Street, Cardiff, Wales

ORGANISATIONAL ARRANGEMENTS

Accountable to:

- 1. (Managerially)** Lead Consultant, Environmental Health Protection
 - 2. (Professionally)** Professional Lead Consultant, Health Protection
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JOB PURPOSE

This new Environmental Public Health Specialist post will join the dynamic Environmental Public Health Team at Public Health Wales. This is a key role to assist delivery, and increase the impact, of environmental public health services in Wales. The Team comprises Consultants in Environmental Public Health, Principal Environmental Public Health Specialist, programme and administrative support.

The post-holder will have, and apply, specialist scientific technical knowledge and skills to:

- Help deliver the Team's core programme of work (including the in-hours reactive "Duty Desk" function) to assess and manage risks from environmental public health-related incidents, enquiries and consultations.
- Assess risks from, and help lead, inform, support and evaluate collaborative action to tackle, air pollution and in Wales (including related decarbonisation work, in line with relevant organisation and policy aims);

- Lead, inform and support development of environmental public health indicators and tracking/surveillance in Wales, and contribute to the identification, implementation and evaluation of actions identified from this information.

The post holder must be able to think and act innovatively and be able to take the initiative where appropriate.

The post holder will communicate/liaise with senior colleagues across Public Health Wales and also with external partner agencies, as required.

The post holder will take on ad hoc project staff management responsibilities and be expected to develop business cases and grant applications to obtain funding, manage any project funding/grants and deliver outcomes in line with specified project/work objectives.

The post holder will be expected to adopt a flexible approach when the needs of the service require.

DUTIES AND RESPONSIBILITIES

The post holder will work independently, providing specialist expertise on a range of scientific and practice areas under the overall guidance of the Lead Consultant in Environmental Public Health.

Communication and Relationship Skills

- Provide and receive complex, sensitive and contentious information orally, in writing and electronically to inform work colleagues, the public and stakeholders. This may include confidential patient or programme data.
- Communicate and liaise effectively with different directorates, divisions and stakeholders as directed and required on a range of complex topics. This could include senior Public Health Wales colleagues and those from external agencies such as Welsh Government, local authorities, Natural Resources Wales and academic institutions.
- Building and managing delivery plans in line with activities and requirements.
- Liaise, develop and build relationships with effective lines of communication with key partners.
- Represent Team at internal and external meetings (including making presentations) when appropriate.
- Undertake and draft evidence reviews, reports, communications and technical reports and resources, ensuring a high standard of presentation.
- Anticipate, recognise and takes appropriate action where changes need to be made to enable effective communication, display tact, diplomacy and confidentiality, using persuasive and negotiating skills when necessary.

- Prioritise and summarise re- and pro-active work and correspondence. This may include confidential and sensitive issues and will require the post holder to exercising independent judgement.

Knowledge, Training and Experience

- Proven ability to: work within a team, be adaptable, be diplomatic/ tactful, maintain required levels of confidentiality, communicate effectively and be self-motivated. Excellent written and oral communication skills are required.
- Highly developed specialist knowledge, underpinned by theory and experience. In-depth specialist knowledge of environmental public health epidemiology (especially air quality), information analysis and statistics, surveillance, and the use of information across the NHS.
- Degree in environmental public health science or related field. Knowledge and experience of principles and practice of environmental public health to higher degree level (Masters/PhD) or equivalent experience.
- Knowledge and practice of data collection instrument design and implementation.
- Advanced experience and expertise in Microsoft Office software (Excel, Access, PowerPoint, Word, and Outlook).
- Experience with Geographical Information Systems
- Advanced/ proven skills in accessing and management of large and complex databases, data transmission and checking for data quality using software packages
- Knowledge and proven skills in analysis of epidemiological and surveillance data using software packages
- Proven experience in scientific report writing and presentation of highly complex data and information, including peer-reviewed scientific publications.
- Proven experience and ability to project manage; deliver to deadlines, working with autonomy when required.
- Proven experience of working autonomously and without supervision, using own initiative, but with access to advice when necessary.
- Undertaking data collection, collation and inputting into complex spreadsheet and documents.
- Experience and understanding of project/programme methodology and monitoring.
- Ability to undertake complex dynamic risk assessments in the context of environmental incidents and enquiries, and support wider health protection activities in the event other emergency situations, including disease outbreaks.

Analytical and judgemental skills

- Lead and apply specialist data analysis / statistical input into applied air quality and wider environmental public health-related tracking and surveillance work.
- Identifying and testing new data sources and novel techniques to improve the understanding of environmental public health issues.
- Contributing to the development of new ideas and surveillance opportunities.
- Judgements involving highly complex facts or situations, requiring the analysis, interpretation and comparison of a range of options as experts in their field. Analyses, interprets and resolves highly complex epidemiological, statistical and information problems where there is no precedent and where other leading opinions may conflict.
- The post-holder is required to make judgements on whether data accurately reflect situations, comparing a range of possible explanations, based on knowledge of how information has been obtained and on audits of data quality.
- Appraise options for methods of data collection, analysis, presentation, and interpretations, and exercise judgment in selecting appropriate options, within the limits of professional competence and seeking advice as appropriate.
- Exercise professional judgement where there is no precedent or where interpretations are conflicting, including with external opinion, within the limits of professional competence and seeking advice as appropriate.
- Design and implement analysis of health indicators for environmental public health, including air quality, to help demonstrate the effect of policy and practice components and interactions.
- Provide statistical advice and leadership on complex studies and analyses.
- Construct quantitative associations between environmental hazards and health drivers/outcomes, and actions and policies for health equity, working across and beyond Public Health Wales through effective collaborations.
- Translate findings for a range of audiences and support advocacy and dissemination to mobilise effective public health action across sectors and disciplines. Produce graphical representations of the data showing trends and patterns in environmental health hazards and outcomes.
- Provide advice on research/statistical methods, use and analysis of data.
- Develop partnerships with academic and other relevant organisations/centres to facilitate joint work and proposals.
- Write academic papers, reports and policy briefs; develop presentations for different audiences.
- Undertake complex data collection and analysis using a range of methods, including appraisal of a range of options and interpretation of data from a range of sources.

- Develop innovative analytic/statistical approaches, including development of new methods or applications according to topic area and policy priority.

Planning and Organisational Skills

- Plan and initiate, in collaboration with others, a programme of ongoing, high quality, innovative work, which is compatible with the aims and objectives of the Team, Division, Directorate and organisation as identified in the business plan. Support the production of written reports and documents e.g. programme/project updates.
- Prepare plans to meet the epidemiological surveillance, and information needs of stakeholders.
- Contribute to departmental and strategic planning in line with the Team's and organisation's plans.
- Project manage plans to deliver results within fixed deadlines.
- The post-holder is required to prioritise work effectively, to account for the needs of urgent unforeseen matters arising, such as urgent information requests and providing assistance in public health emergencies.

Physical Skills

- Advanced keyboard skills required for completing reports, documents, data entry and manipulation from databases and geographical information systems.
- Occasional field investigations including site visits and meetings with members of the public.

Responsibility for Patient/Client Care

- The post holder will be expected to work with members of the public/external organisations e.g. in the event of an incident, outbreak, emergency situation or at attendance of events/external locations.
- The post-holder is required have input into guidance, information leaflets and other resource materials for professionals and public (including patients).

Responsibility for Policy/Service Development

- The post-holder will be expected to contribute to developing Team and Divisional policy and practice.
- Takes a leading role in the development of air quality policy and practice and surveillance and reporting, which often impacts beyond Public Health Wales.
- Propose any changes to team policies and procedures considered necessary to achieve the broad objectives of Division, Directorate and Organisation.
- Monitors the quality of the work and takes appropriate action to address any areas where standards can be improved.

- The post-holder will be expected to contribute to and be responsible for producing and keeping updated guidance and other information resources.
- Takes an active part in the review and development of their own work against the KSF outline for the post and suggests areas of learning and development.

Responsibility for Financial and Physical Resources

- Project management, including staff management/supervision, developing funding development business cases and grant applications, managing a delegated budget for the project and co-ordination action for delivery of specific work outcomes.
- The post-holder is required to observe personal duty of care in relation to equipment and resources.

Responsibility for Human Resources

- Project management, including staff management/supervision and co-ordination for delivery of specific work outcomes.
- Professional training, both within the department and to other groups as required.

Responsibility for Information Resources

- The post holder develops evidence summaries and information resources to support effective action to improve air quality in Wales.
- The post holder leads on analysis and presentation of surveillance and epidemiological data, providing analyses and interpretations that are relied upon by colleagues and available to the general public.
- The post-holder will be required to design and implement team protocols and procedures, information systems, processing information and generating resources to be used by Public Health Wales and partners, as a principal requirement of the job.
- The post-holder will be required to improve current data collection and reporting systems, auditing where necessary to ensure accuracy and validity of output.
- The post-holder will be required to ensure individual identity is protected in any reporting system, as they will deal with patient identifiable information, in line with organisational policies.

Responsibility for Research and Development

- Responsible for regular audits and analyses in support of service development.

- Support for developing and implementing research projects through identification of knowledge gaps, production and editing of protocols, funding proposals, research and ethical documentation; and conduct and analysis of research studies.
- Discussion and presentation of research at educational meetings and other forums.
- A component of the post-holder's work will be developmental and will involve initiation, managing and auditing new methods of data collection, analysis and reporting.

Freedom to Act

- Required to prioritise their work and to work on their own initiative and manage their own workload and deadlines, seeking advice if necessary.
- The post-holder will need to work with autonomy when required and be able to delegate and supervise appropriate work to set and help achieve objectives while working within broad organisation policies
- Act with minimum guidelines, setting standards for others, establishing how professional and administrative policies should be interpreted and implemented.
- The post-holder will need to demonstrate adaptability to direct field investigations in the light of emerging evidence.

Mental Effort

- Frequent requirement for concentration, work pattern is unpredictable; occasional prolonged concentration.
- Concentration required when analysing statistical information, writing reports, interruptions to answer customer queries; requirement to concentrate for long periods on complex data analysis.

Emotional Effort

- Occasionally can be exposed to distressing or emotional circumstances e.g. receiving and responding to correspondence and telephone calls of a distressing nature.

Working Conditions

- Exposure to unpleasant conditions is rare.
- The post holder will work mainly in office conditions, but may be required to visit sites for field investigation.
- The post holder may be required to travel to meetings/events across Wales and other areas, including outside the UK.

- Required to use a visual display unit most days.

Professional development

- Undertakes a programme of CPD
- Participate in appraisal and job planning
- Develops and reviews personal development plans, in conjunction with line manager

COMPETENCE

You are responsible for limiting your actions to those which you feel competent to undertake. If you have any doubts about your competence during the course of your duties you should immediately speak to your line manager / supervisor.

REGISTERED HEALTH PROFESSIONAL

All employees of the Trust who are required to register with a professional body, to enable them to practice within their profession, are required to comply with their code of conduct and requirements of their professional registration.

SUPERVISION

Where the appropriate professional organisation details a requirement in relation to supervision, it is the responsibility of the post holder to ensure compliance with this requirement. If you are in any doubt about the existence of such a requirement speak to your Manager.

RISK MANAGEMENT

It is a standard element of the role and responsibility of all staff of the Trust that they fulfil a proactive role towards the management of risk in all of their actions. This entails the risk assessment of all situations, the taking of appropriate actions and reporting of all incidents, near misses and hazards.

RECORDS MANAGEMENT

As an employee of Public Health Wales NHS Trust, you are legally responsible for all records that you gather, create or use as part of your work within the Trust (including patient health, financial, personal and administrative), whether paper

based or on computer. All such records are considered public records, and you have a legal duty of confidence to service users (even after an employee has left the Trust). You should consult your manager if you have any doubt as to the correct management of records with which you work.

HEALTH AND SAFETY REQUIREMENTS

All employees of the Trust have a statutory duty of care for their own personal safety and that of others who may be affected by their acts or omissions. Employees are required to co-operate with management to enable the Trust to meet its own legal duties and to report any hazardous situations or defective equipment.

FLEXIBILITY STATEMENT

The content of this Job Description represents an outline of the post only and is therefore not a precise catalogue of duties and responsibilities. The Job Description is therefore intended to be flexible and is subject to review and amendment in the light of changing circumstances, following consultation with the post holder.

CONFIDENTIALITY

All employees of the Trust are required to maintain the confidentiality of members of the public (patients, well women and service users etc.) and members of staff in accordance with Trust policies.

Public Health Wales is a non-smoking environment

Date Prepared: 31/10/2019

Prepared By: Huw Brunt

Reviewed By: Giri Shankar

PERSON SPECIFICATION

Environmental Public Health Scientist

	ESSENTIAL	DESIRABLE	METHOD OF ASSESSMENT
QUALIFICATIONS	<ul style="list-style-type: none"> Degree in an environmental/ public health, science or related relevant subject Masters qualification or equivalent experience acquired in an environmental public health health or research field A qualification or demonstrable training/ experience in public health, health protection or epidemiology 	<ul style="list-style-type: none"> Postgraduate training in areas such as: air quality, environmental epidemiology, surveillance methods, public health, statistics, data science 	Application Form Certificate / Registration Check
EXPERIENCE	<ul style="list-style-type: none"> Substantial post-graduate experience of relevant environmental health protection practice and scientific work Demonstrable experience of working within a public health setting Experience of working in the field of air quality Experience of working in the field of environmental health protection Experience of surveillance and epidemiology Experience of working with large complex databases Understanding of current scientific and/or epidemiological advances Experience of training other staff groups Experience in epidemiological study/ research methods, including data collection instruments and linking and analysing datasets Staff line management experience Budget management 	<ul style="list-style-type: none"> Working in an NHS environment Experience of developing and monitoring performance indicators Working in an NHS environment Specialist knowledge of further analytic and descriptive analyses in epidemiology including mapping, data linkage and time series analysis Record of peer-reviewed publications and scientific report writing Knowledge of health-care systems in Wales Knowledge of staff management 	Application Form Interview References

	experience (including developing funding business cases and grant applications to obtain funding, managing <i>ad hoc</i> project funding/grants and delivering against specified work outcomes)		
SKILLS	<ul style="list-style-type: none"> • Advanced knowledge and understanding of environmental health protection issues, especially air quality, decarbonisation and related fields • Sound grasp of epidemiological and statistical methods • Effective oral and written communication skills. Ability to document and communicate clearly and succinctly. • Excellent computer literacy, including advanced skills in Microsoft Office applications • Ability to project manage, coordinate teams and problem solve • Professional judgments on methods and interpretation 	<ul style="list-style-type: none"> • Advanced skills in mapping and database software to manage and analyse complex data • Ability to speak Welsh or willingness to learn 	Application Form Interview References
KNOWLEDGE	<ul style="list-style-type: none"> • Knowledge of environmental health protection policy and practice • Knowledge of air quality and wider environmental public health issue policy and practice • Knowledge of surveillance/epidemiological principles and their application to environmental public health • Sound understanding of the environmental public health 'system' or 'community' in Wales • Awareness of policies and procedures relating to environmental public health practice and research. 	<ul style="list-style-type: none"> • Knowledge of Public Health Wales 	Application Form Interview References
PERSONAL ATTRIBUTES	<ul style="list-style-type: none"> • Ability to work to deadlines and under pressure. 	<ul style="list-style-type: none"> • Ability to work in challenging or 	Application

(Demonstrable)	<ul style="list-style-type: none"> • Flexible approach and commitment to apply skills in support of clinical/scientific priorities • Proven track record as a team player • Enthusiastic approach with excellent planning and organisational skills • Negotiation and diplomacy skills to work with a wide range of staff • Ability to work on own initiative. • Good time-keeping. • Respect confidentiality. • Willingness to learn and develop skills. 	different circumstances	Form Interview References
OTHER (Please Specify)	<ul style="list-style-type: none"> • Ability to foster and maintain good working relationships with administrative staff, scientific staff and health professionals at all levels • Commitment to CPD within Public Health competency frameworks • Prepared to travel 	<ul style="list-style-type: none"> • Evidence of continuing professional Development 	Application Form Interview Document Check

Date prepared: 31/10/2019

Prepared by: Huw Brunt

Date reviewed: 31/10/2019

Reviewed by: Giri Shankar

Agreed by:

Employee's name and signature:

Date:

Agreed by:

Manager's name and signature:

Date:

