

Role Description

MOH - Senior Analyst / Biostatistician

Cluster	NSW Health
Agency	Ministry of Health
Division/Branch/Unit	Population and Public Health/ Epidemiology and Evidence
Location	St Leonards
Classification/Grade/Band	Clerk Grade 9/10
Role Number	various
ANZSCO Code	TBA
PCAT Code	TBA
Date of Approval	June 2025
Agency Website	www.health.nsw.gov.au

Agency overview

For more information go to www.health.nsw.gov.au

Primary purpose of the role

The Senior Analyst / Biostatistician provides expert advice, data analytics and support on a full range of projects, strategies, and issues to contribute to population health and broader public health objectives.

Key accountabilities

- Carry out statistical analysis, including using linked data, for priority projects in the Centre for Epidemiology and Evidence and Population and Public Health Division
- Provide timely expert biostatistical advice and support regarding the analysis and interpretation of population health indicators for performance monitoring and public reporting
- Provide high-level biostatistical advice, analysis and support for evaluations of high priority Population and Public Health Division programs and interventions
- Provide technical advice and prepare reports, ministerial briefs and correspondence in relation to other requests for statistical information, responses to parliamentary questions, speech notes and discussion papers
- Manage projects aimed at developing new methods and indicators for population health monitoring and surveillance and to assess the validity and reliability of epidemiological and surveillance data.
- Develop statistical analytical programs for data analysis, reporting and visualisation for surveillance purposes from health administrative data systems
- Support the development of statistical systems for the warehousing and curation of health administrative data for epidemiological use in surveillance and research
- Support the management of and conduct analysis on ad-hoc data collections developed in response to emerging population health threats such as disease outbreaks, environmental hazards and other matters of significant public health concern.

- Provide biostatistical supervision and mentoring for Trainees on the NSW Biostatistics Training Program as well as advice on competencies, placement development and strategic issues for the Program

Key challenges

- Operating in a high-pressured, complex environment with short timeframes and conflicting priorities.
- Negotiating with internal stakeholders regarding the provision of analytics services that meet client needs and the divergent priorities attendant in this process.
- Providing consistently high-quality reports and analysis, for publication and responding to ad hoc requests for statistical information often at short notice against a background of high work volumes and demands for accurate, expert responses to complex issues, requiring the integration of diverse sources of information.
- Anticipating and planning for the technical complexities inherent in epidemiological/biostatistical analyses across highly complex, dynamic and expanding medical fields with a commensurate growth in demand for epidemiological/biostatistical data and related information.
- Maintaining a strong grasp of current developments in the rapidly changing analytics environment.

Key relationships

Who	Why
Internal	
Key staff and Managers	<ul style="list-style-type: none"> • Consult, collaborate and provide sound information and advice
External	
Local Health District population health services;	<ul style="list-style-type: none"> • Consult, collaborate and provide sound information and advice
Bureau of Health Information, Agency for Clinical Innovation, Clinical Excellence Commission, Voluntary Assisted Dying Board Secretariat	<ul style="list-style-type: none"> • Maintain collaborative relationships; provide and seek information and advice
Other Agencies such as the Department of Health and Aging, Australian Institute of Health and Welfare, the Australian Bureau of Statistics and the Registry of Births, Deaths and Marriages	<ul style="list-style-type: none"> • Maintain collaborative relationships; provide and seek information and advice
Academic organisations involved in biostatistics	<ul style="list-style-type: none"> • Maintain collaborative relationships; provide and seek information and advice

Role dimensions

Decision making

The decision making required of the role relates to:

- Setting work priorities within agreed parameters and approved work and project plans, organising and managing own workload and allocation of tasks to staff assisting with projects.
- Providing expertise and working collaboratively with internal and external stakeholders, consulting on and enlisting commitment to specific strategies.

- Deciding the content of reports, submissions, policies, correspondence, and briefs, which are prepared in final form and are expected to require only minimal input from the supervisor
- Deciding the content of advice and information provided to Ministry and external stakeholders.
- Managing change, taking ownership for assigned work and issues as they arise, and being proactive in suggesting new policies, strategies and processes to improve performance or address issues.

Decisions which are referred to a supervisor include:

- Any decision that will substantially alter the outcomes or timeframe of a project.
- Major issues or conflicts arising in the course of project and other duties.
- Matters requiring a higher delegated authority such as approval for expenditure and/or travel.
- Matters requiring submission to the Secretary.

Reporting line

Principal Analyst and Manager.

Direct reports

Nil

Budget/Expenditure

Nil

Essential requirements

- Postgraduate degree in biostatistics or equivalent
- Sound knowledge of health data and the NSW (or Australian) health system
- Excellent communication and negotiation skills
- Extensive experience in the use of data management and statistical analysis software, including proficiency in R, SQL or similar programming languages. Demonstrated capability to learn new tools / software.
- High level knowledge of analytics concepts and methods, substantial experience in the use of the associated statistical, data management, and knowledge of databases and software quality principles.




Capabilities for the role

The NSW Public Sector Capability Framework applies to all NSW public sector employees.

Capability summary

The full list of capabilities and the level required for this role are set out below. The focus capabilities appear in bold. Refer to the next section for further information about the focus capabilities.

NSW Public Sector Capability Framework

Capability Group	Capability Name	Level
 Personal Attributes	Display Resilience and Courage	Adept
	Act with Integrity	Intermediate
	Manage Self	Adept
	Value Diversity and Inclusion	Intermediate
 Relationships	Communicate Effectively	Adept
	Commit to Customer Service	Adept
	Work Collaboratively	Adept
	Influence and Negotiate	Intermediate
 Results	Deliver Results	Intermediate
	Plan and Prioritise	Adept
	Think and Solve Problems	Adept
	Demonstrate Accountability	Intermediate
 Business Enablers	Finance	Intermediate
	Technology	Adept
	Procurement and Contract Management	Intermediate
	Project Management	Adept

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Personal Attributes Display Resilience and Courage	Adept	<ul style="list-style-type: none"> • Be flexible, show initiative and respond quickly when situations change • Give frank and honest feedback and advice • Listen when ideas are challenged, seek to understand the nature of the comment and respond appropriately • Raise and work through challenging issues and seek alternatives • Remain composed and calm under pressure and in challenging situations
Relationships Communicate Effectively	Adept	<ul style="list-style-type: none"> • Tailor communication to the audience • Clearly explain complex concepts and arguments to individuals and groups

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Work Collaboratively	Adept	<ul style="list-style-type: none"> • Monitor own and others' non-verbal cues and adapt where necessary • Create opportunities for others to be heard • Actively listen to others and clarify own understanding <hr/> <ul style="list-style-type: none"> • Encourage a culture that recognises the value of collaboration • Build cooperation and overcome barriers to information sharing and communication across teams and units • Share lessons learned across teams and units • Identify opportunities to leverage the strengths of others to solve issues and develop better processes and approaches to work • Actively use collaboration tools, including digital technologies, to engage diverse audiences in solving problems and improving services
Business Enablers Technology	Adept	<ul style="list-style-type: none"> • Identify opportunities to use a broad range of technologies to collaborate • Monitor compliance with cyber security and use of technology policies • Identify ways to maximise the value of available technology to achieve business strategies and outcomes • Monitor compliance with the organisation's records, information and knowledge management requirements

Occupation Specific Capability Set

The NSW Ministry of Health Data Literacy Capability Framework is complementary to the NSW Public Sector Capability Framework. **Any Data Literacy focus capabilities will appear in bold.**

NSW Ministry of Health Data Literacy Capability Framework		
Group and Capability	Level	Behavioural Indicators
Understand the NSW Health Context	Adept	<ul style="list-style-type: none"> Apply knowledge of the NSW Health system, NSW Government and relevant contextual factors to interpret data and analyses.
Understand data sources and systems	Adept	<ul style="list-style-type: none"> Use knowledge of the context of state and national data to determine the best data or information for a range of purposes.
Approach data analysis and interpretation collaboratively	Adept	<ul style="list-style-type: none"> Ensure regular communication between content area and data experts regarding existing data and information to support projects and programs. Identify opportunities to work collaboratively with other teams/units to solve analytical issues.
Undertake analysis and draw insights	Adept	<ul style="list-style-type: none"> Leverage quantitative and qualitative analysis techniques to produce information to achieve organisational objectives. Manage complex analytical tasks (e.g. machine learning, combining multiple complex and disparate data sets). Apply critical thinking to understand the results of data analysis in their context, and draw insights for NSW Health policies and programs.
Communicate insights to drive decision-making	Adept	<ul style="list-style-type: none"> Clearly communicate information and insights from analysis. Prepare reports and presentations in a way that is suitable for diverse audiences. Contribute to the process of translating insights into policy and practice.
Contribute to a data culture	Intermediate	<ul style="list-style-type: none"> Support a positive learning environment for data literacy.
Practice good data governance	Intermediate	<ul style="list-style-type: none"> Collect, use and disclose data and information in accordance with NSW Health policies and procedures. Understand the principles of data governance including legal, ethical, policy and procedural aspects.