

Epidemiologist – 601

A. Maintains up-to-date knowledge in area(s) of expertise as evidenced by two of the following:

- Scientific meetings/conferences relevant to area of expertise are attended.
- Familiarity with recent subject literature is demonstrated through reading professional journals or scientific literature and reporting to supervisor on a periodic basis.
- Editorials are written for publication or articles or scientific papers are reviewed for peer reviewed professional journals
- A scientific paper that places findings in the context of current literature is written for publication
- Active membership in professional epidemiologic and/or other scientific organizations is maintained

B. Identifies areas of science where future research, analysis, and/or methodological development are needed and designs epidemiologic research plans to address the identified areas of study.

- Concepts are developed to address identified gaps in knowledge relating to public health
- Study proposal is produced, including rationale, sample selection, and appropriate methods
- Key research questions are identified and appropriate research methods are developed
- Study materials are developed in accordance with established program formats
- Appropriate methodologies are incorporated in the research plan to ensure quality control

C. Directs implementation of epidemiological studies as evidenced by five of the following:

- Resources necessary to implement the research plan are obtained
- Contract support is managed by serving as the project officer
- Successful management of the study is ensured through identification and resolution of problems and issues that arise
- Specifications for data files are developed and quality of data is ensured
- Site visits are participated in, directed or coordinated and documentation, as required, is developed
- Technical direction is provided to project team
- Study personnel are directed, coordinated, and overseen to ensure quality work
- Additional subject matter expertise is sought, as warranted, and incorporated into the overall research plan

D. Conducts epidemiologic data analyses as evidenced by three of the following activities:

- Statistical analyses are conducted or overseen
- Data are reviewed to ensure integrity (“data cleaning”)
- Following analyses, tables, figures, graphs, etc, are prepared to summarize and display data
- Peers/other professionals are consulted and collaborated with on data analysis methods and issues
- Quality and accuracy of data analyses is ensured and documented
- Develop publication of study findings for peer reviewed journals
- Study findings are presented at scientific meetings/conferences/seminars.

E. Provides expert scientific advice and guidance in a subject area within the government and to outside entities such as academic institutions, state health departments, non-profit organizations, international organizations, and/or others, including the public.

- Responses are provided to inquiries for data or information from individuals or organizations within or outside the government
- Serves as a peer reviewer for scientific journals
- Provides expert review of proposals for government contracts
- Commentaries, editorials or review articles are prepared to address issues in scientific area of expertise
- At least one workshop is led, or a professional meeting or meeting section is chaired to educate others in area of expertise and to support scientific research
- Fact sheets are developed for dissemination at scientific meetings and conferences
- Study findings are disseminated through presentations at scientific meetings, publishing in peer reviewed journal or updating web content to facilitate knowledge sharing.