



the selection and implementation of the appropriate statistical methodology for analysis, and evaluating the precision and validity of the information collected. Incumbent is responsible for determining that the appropriate statistical methodology is applied, underlying assumptions are addressed, and the results are interpreted and explained correctly. The incumbent often works in a multi disciplinary team setting with researchers having a wide range of quantitative sophistication. Incumbent routinely has multiple projects underway simultaneously with competing project deadlines. **40 %**

The incumbent conducts detailed examination and analysis of all scientific protocols and reports submitted, ensuring that they are statistically and methodologically sound. Works with the investigators to ensure compliance and provides inputs into protocols and reports. The incumbent should ensure that the statistical considerations section is consistent with other parts of the protocol. If there are any amendments to the protocol, the incumbent ensures that the addendum remains statistically sound and continues to be compliant with regulations. The incumbent reviews the changes before submission for approval to the appropriate scientific review committee and the IRB. **45 %**

Serves as recognized expert on advanced methods of statistical analysis, advanced programming consultation and the utilization and analysis of complex multi-stage survey data. Incumbent is relied on to design or adapt creative statistical approaches which are implemented or used by other statisticians or researchers within CDC. Programming duties can include creation, manipulation and analysis of large, complex data sets. These programs include appropriate weighting of statistical tabulations of data from surveys. Devises appropriate methods for summarizing, interpreting and presenting the results of statistical analyses of data compiled from studies and projects. Prepares advanced statistical reports, graphs, charts, tables and narrative material to be used in publishing the results of studies and in giving oral presentations. Independently defines input and output requirements, editing procedures and maintenance routines to ensure data quality. Requires a thorough knowledge of the capabilities of SAS, EPIINFO, STATA or spreadsheet and data base software, and other PC applications. **15 %**

Performs other related duties as assigned.

## **15. QUALIFICATIONS REQUIRED FOR EFFECTIVE PERFORMANCE**

### **a. Education**

Undergraduate degree in statistics and a Master's degree in the field of biostatistics, medical statistics, or public health are required.

### **b. Prior Work Experience**

Six years' working experience in data management, programming and analysis position in the health field and in advanced analysis using either SPSS, SAS, STATA or any other statistical software is required.

### **c. Post Entry Training**

N/A

### **d. Language Proficiency: List both English and host country language(s) by level and specialization.**

Level IV English (fluent) is required. Must have the ability to read and write technical manuals and scientific papers in English.

### **e. Knowledge**

In-depth, comprehensive, and evolving knowledge of statistical and mathematical analysis techniques integrated with computer applications is required. Higher mathematical ability with a solid background in statistics and the calculus of probability is required. Knowledge of parametric and non-parametric techniques, along with categorical data analysis, and advanced statistical techniques are required. Must have excellent knowledge of multiple statistical software.

### **f. Skills and Abilities**

The ability to assess the requirements of a project and determine the most efficient and timely statistical techniques is required.

## **16. POSITION ELEMENTS**

### **a. Supervision Received**

Incumbent works under the general supervision of the Statistics and Data Unit Lead. Incumbent receives only general direction on the nature and scope of the assignment and is given broad latitude in the technical approach and

coordination/integration of other staff in implementing methods to meet project needs. Works independently, referring only major problems or questions to the CDC-Uganda Statistician or to the CDC-Uganda Chief of Strategic Information. Work is reviewed in terms of overall effectiveness in meeting the requirements of the assignment.

**b. Available Guidelines**

Incumbent operates within the existing CDC-Uganda policies, procedures and guidelines. Often, the incumbent may have to rely on the technical literature and theory in statistics, mathematics or subject matter area, and on creativity and resourcefulness to arrive at technically defensible approaches.

**c. Exercise of Judgment**

Incumbent must deal with a variety of statistical, mathematical, computational, and subject matter issues related to research in CDC-Uganda projects. Incumbent is recognized as a specialist by other researchers in the areas of study design, data analysis, use of appropriate statistical techniques and associated computing software, techniques in complex survey analysis and associated specialized software, and the assessment and interpretation of data, results, and methods. Incumbent keeps abreast of new developments and applications in the field of bio-statistics, mathematics, and computational techniques.

**d. Authority to Make Commitments**

None.

**e. Nature, Level and Purpose of Contacts**

Technical contacts are often with individuals involved in UVRI-CDC collaboration. Incumbent engages in highly technical discussions with other technical and subject matter experts from other organizations, as well as international institutions.

**f. Supervision Exercised**

Incumbent supervises other data management staff at UVRI-CDC supported institutions and organizations in Uganda.

**g. Time Required to Perform Full Range of Duties after Entry into the Position**

52 weeks.