# **<u>1530</u>** – Statistician (Data Scientist)

## Major Duties for This Position May Include:

- The incumbent serves as a recognized expert and advisor in the application of statistical and data science applications for complex and diverse public health use cases.
- The incumbent supports and advises on a number of high-level activities related to surveillance and public health data and the practice of data science at CDC.
- Serves as an expert in the analysis and quality evaluation of complex public health data.
- Prepares comprehensive reports that include discussion of substantive issues related to methodology for public health surveillance and related applications.

## **Related Competencies**

- Quantitative Theories and Methods
- Public Health Knowledge
- Data Analysis and Interpretation
- Data and Information Management
- Statistical Software Literacy

## **Basic Requirements**

**Degree** that included 15 semester hours in statistics (or in mathematics and statistics, provided at least 6 semester hours were in statistics), and 9 additional semester hours in one or more of the following:

- Physical or biological sciences
- Medicine
- Education
- Engineering
- Social sciences including demography, history, economics, social welfare, geography, international relations, social or cultural anthropology, health sociology, political science, public administration, psychology, etc

Credit toward meeting statistical course requirements should be given for courses in which 50 percent of the course content appears to be statistical methods, e.g., courses that included studies in research methods in psychology or economics such as tests and measurements or business cycles, or courses in methods of processing mass statistical data such as tabulating methods or electronic data processing.

or

**Combination of education and experience** that includes courses as shown above, plus appropriate experience or additional education. The experience should have included a full range of professional statistical work such as

- A. Sampling
- B. Collecting, computing, and analyzing statistical data
- C. Applying statistical techniques such as measurement of central tendency, dispersion, skewness, sampling error, simple and multiple correlation, analysis of variance, and tests of significance.

## Minimum Qualifications

In additions to meeting the basic requirements above, applicants must meet the minimum qualifications requirement as defined below:

### **GS-07 Specialized Experience Requirements**

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-05 grade level in the Federal Service. Specialized experience for this position includes:

- Collecting data from complex national surveys/data systems
- Planning and preparing presentations of data (i.e., graphic, tabular)

#### Or Education

One full year of graduate level education.

#### Or Superior Academic Achievement

Based on a bachelor's degree that is demonstrated through class standing (upper 1/3 of class); grade point average (3.0/4.0 overall or 3.5/4.0 in major), or election to membership in a qualifying national scholastic honor society.

#### Or Combination

You may qualify on a combination of education and experience, the total percentage of experience at the required grade level compared to the specialized experience requirement, as well as the percentage of completed education compared to the educational requirement must equal at least 100 percent.

### **GS-09 Specialized Experience Requirements**

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-07 grade level in the Federal Service. Specialized experience for this position includes:

- Conducting analysis, visualization, and interpretation of population health data from complex survey data
- Conducting research and analyses designed for the purpose of identifying, analyzing, visualizing, and reporting on emerging public health issues and problems

### Or Education

2 years of progressively higher-level graduate education leading to a master's degree *or* master's or equivalent graduate degree. **TRANSCRIPTS REQUIRED** 

### Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 18 semester hours (27 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED**.

## **GS-11 Specialized Experience Requirements**

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-09 grade level in the Federal Service. Specialized experience for this position includes:

- Monitoring data tabulations ensuring accuracy and quality of data
- Developing the analytical plan incorporating appropriate statistical methods and techniques

#### Or Education

Ph.D. or equivalent doctoral degree **or** three (3) full years of progressively higher-level graduate education leading to such a degree. **TRANSCRIPTS REQUIRED**.

#### Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 36 semester hours (54 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED**.

### **GS-12 Specialized Experience Requirements**

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-11 grade level in the Federal Service. Specialized experience for this position includes:

- Advising in the application of statistical and data science applications for complex and diverse public health use cases
- Overseeing the analysis of data using a variety of technologies
- Collecting data from complex national surveys/data systems

Note: There is no substitution of education for specialized experience at the GS-12 level.

## **GS-13 SPECIALIZED EXPERIENCE REQUIREMENTS**

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-12 grade level in the Federal Service. Specialized experience for this position includes:

- Conducting research and analyses designed for the purpose of identifying, analyzing, visualizing, and reporting on emerging public health issues
- Interpreting complex survey data to a variety of government and nongovernment user groups.

Note: There is no substitution of education for specialized experience at the GS-13 level.

## **GS-14 Specialized Experience Requirements**

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-13 grade level in the Federal Service. Specialized experience for this position includes:

- Providing expert analysis in the statistical and data science applications
- Representing the agency as a statistical and data science expert in national and/or international scientific meetings
- Analyzing complex survey data for public health surveillance and informatics applications

Note: There is no substitution of education for specialized experience at the GS-14 level.

**Experience** refers to paid and unpaid experience. Examples of qualifying unpaid experience may include volunteer work done through National Service programs (such as Peace Corps and AmeriCorps), as well as work for other community-based philanthropic and social organizations. Volunteer work helps build critical competencies, knowledge, and skills; and can provide valuable training and experience that translates directly to paid employment. You will receive credit for all qualifying experience, including volunteer experience.