Labor Category Descriptions and Basic Qualifications

1.   PROGRAM DIRECTOR - (CONTRACT KEY PERSONNEL)

Organizes, directs and manages support services for all activities covered by this contract; obtains staff for subordinate personnel; serves as a liaison among contractor's corporate management, program managers and CDC's contract and program directors/managers; has ultimate responsibility for contractor resources and the accomplishment of all tasks assigned under this contract. Authorized to negotiate and make binding decisions on behalf of the company, including signatory authority. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates. Shall be responsible for the overall contract performance and shall not serve in any other capacity under this contract.

2.   PROGRAM MANAGER- (CONTRACT KEY PERSONNEL)

Manages substantial software development contract support operations including multiple projects. Organizes, directs, and coordinates planning and production of all the contractor's support activities. Demonstrated experience for oral and written communications with all levels of management for planning and control of projects. Interfaces with CDC management personnel, CDC contracts staff, and other cognizant CDC officials. Capable of meeting in conference with CDC project managers and stating problems in a form capable of being solved. Formulates and reviews project plans, determines cost, and ensures conformance to work standards. Assigns, schedules, and reviews work of subordinates. Able to evaluate proposed information systems to determine technical feasibility with government specified technologies, cost for implementation and operation, as well as functional adequacy. Demonstrated ability to manage a team composed of analyst/programmers and specialists in designing and implementing computer systems.

Serves as Program Manager for a large, complex program with centralized and task orders support requirements. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates. Shall be responsible for the overall contract performance and shall not serve in any other capacity under this contract. Manages substantial network management contract support operation including multiple projects. Manages a team composed of task managers, network engineers, technicians, and other specialists in designing, implementing, maintaining, and troubleshooting computer networks; and installing, operating, maintaining, and troubleshooting microcomputers. Organizes, directs, and coordinates planning and production of all the contractors' support activities. Formulates and reviews project plans, determines cost, and ensures conformance to work standards. Assigns, schedules, and reviews work of subordinates. Evaluates proposed microcomputer and network systems to determine technical feasibility with government

specified technologies, cost for implementation and operation, as well as functional adequacy. Responds quickly and efficiently in crisis situations. Authorized to negotiate and make binding decisions on behalf of the company, including signatory authority.

3. TASK MANAGER - (CONTRACT KEY PERSONNEL)

Serves as task manager for large and small, complex task order (or a group of task orders) and assists the Program Manager in working with government management personnel. Under the guidance of the Program Manager, is responsible for the overall management of the specific task order(s) and ensuring that the technical requirements and schedules in the task order are being fully supported in a timely manner. Manages and controls substantial (e.g., multi- system, and/or multifunction) microcomputing operations and support; and network administration and management. Manages assigned network management contract staff supporting multiple task orders and projects. Organizes, directs, and coordinates estimating, planning, conducting, producing, monitoring, and reporting of all the contractor's personnel support activities. Assigns, schedules, and reviews work of subordinates. Management functions consist of user support, computer/network operations, network maintenance, data entry, specialized workstations, production control, operating system software analysis, and support tasks and activities performed by the contractor's staff. Plans, directs, controls, schedules, coordinates, and organizes utilization and management of tasks and projects. This also includes security, both physical facility and hardware and software systems, and applications; monitoring of hardware usage, and recommending methodology for more efficient utilization. Evaluates alternatives for more efficient and effective accomplishment of work; establishes procedures, and develops documentation. Interfaces with CDC management personnel, CDC technical monitors and staff, and other cognizant CDC officials. Escalates problems in accordance with established procedures.

4. ADP Security Specialist

Provides support to ensure applicable government Information Resources Management standards, policies, procedures, guidelines, rules, and regulations are followed for ADP security. Develops corporate contingency plans and disaster recovery procedures.

5. Biostatistician

Specializes in the application of statistics and/or computer technology to biological studies. Requires thorough knowledge and use of statistical software packages such as SAS, BMDP, SPSS or PL/1.

6. Computer Assistant

Prepares, creates, designs, develops, and maintains spreadsheets, reports, and records. Develops presentation quality graphics. Maintains inventory of hardware/software. Tracks checkout of loaner hardware/software. Assists with setting up spreadsheets including entering column and row titles, defining cell formats, etc. Operate automated

typewriting equipment and utilize word processing computer systems to record and store statistical, technical and textual information for immediate or future revision, insertions, deletions and subsequent reproduction of reports and documents. Using rough drafts or printed copy as a source document, the operator uses independent judgement to key in specific commands to the automated word processing system to achieve the required formats of textual material including paging, indentation, spacing, selection of character fonts, and insertions of heading. Using draft copies of a manuscript, the operator may also assist in proofreading and correction of syntactical and grammatical errors.

7.   **Computer Operator II**

Monitors operation of the computer. Recognizes, diagnoses, and independently acts on hardware and software malfunctions and error situations to insure processing is in accordance with run instructions and saves files to recover properly. Submits, holds, or releases batch jobs as required. Evaluates real-time system performance, takes appropriate authorized standard actions and notifies appropriate senior operations or systems staff of problems. Performs system recovery and back-up, IPLs the system, loads system software, and performs all routine tasks associated with the operation of a mainframe or minicomputer. Develops and implements problem resolution procedures including a "HELP Desk" capability for user assistance.

8.   **Computer Operator I**

Assists in monitoring operation of the computer as well as tending to the associated peripheral devices. Reports and records hardware malfunctions and error situations. Prepares output for distribution. Mounts and dismounts tapes as required. Services printers, tape drives, and other peripheral equipment according to instructions.

9.   **Computer Programmer III**

Provides high level expertise in developing complex software applications involving new technologies, methods, concepts, or approaches. Based on functional and conceptual design specifications, develops diagrammatic plans and design logic required to implement computer programs, ADP systems and procedures in support of technical, administrative and information management functions and operations. Analyzes specification developed by a Systems Analyst for such factors as type and extent of information to be processed, designs detailing logic flow diagrams and program code instructions. Verifies accuracy and validity of programs by preparing sample test data and test plans; corrects program errors by revising instructions; modifies programs when required by changes in procedures and reports desired. Performs the above duties under general supervision. Provides detailed instructions and program design specification to intermediate level programmers assigned to a project team, and closely supervise their performance.

10.   **Computer Programmer II**

Provides programming services in developing relatively complex application using standard approaches or less complex systems using new approaches. Able to independently run an entire system or portion thereof and to review and process its output for validity and accuracy.

11. **Computer Programmer I**

Provides entry level programming support using standard approaches. Studies all systems requirements and develops all levels of block diagrams and logic flow charts. Translates the specifications into a program of coded instructions used by the computer. Tests, checks, debugs, revises and refines the program as required, to produce the deliverables required by written specifications. Additionally, documents all procedures used throughout the program to allow the program to be run as part of a system, and completes systems documentation to enable a subsequent programmer to make changes as may be required. Able to revise existing programs to make refinements, increase operating efficiency or improve present techniques.

12. **Computer/Statistical Assistant**

Provides routine analysis and interpretation of data as well as data entry, coding, and transcription. Development of presentation graphics. Enters definitions of variables for survey questionnaires and surveillance forms, including variable names, range labels, default values, and question strings. Assists with development of analysis files for SAS datasets including creation of format libraries, entering titles for tables, and entering previously defined program statements. Assists with setting up spreadsheets including entering column and row titles, defining cell formats, entering previously defined formulas, and exporting results for use in other software packages. Assists with copying tape and disk datasets and transferring files between the mainframe and microcomputers.

13. **Data Analyst III**

Provides high level expertise in information modeling, requirement analysis and facilitation using Integrated Computer Aided Manufacturing DEFinition (IDEF) methodologies. Performs analysis to develop fully attributed logical and physical information (data) and business process models following IDEF methodologies. Gather requirements using Joint Application Design (JAD) facilitation techniques in order to collect and define data. Process requirements necessary to support complex large scale and/or decision support systems. Use modeling tools and repositories to effectively and efficiently define and manage the gathering/dissemination of data and business process requirements. Use information gathered to develop database specifications. Designs relational database schemas to support large-scale, mid-tier clients/server, or web-based applications. Use on-line Analytical Processing (OLAP) tools and techniques to effectively implement and manage a data warehouse.

14. **Data Analyst II**

Provide medium level expertise in information modeling, requirement analysis and facilitation using IDEF methodologies. Performs analysis to develop fully attributed logical and physical information (data) and business process models following IDEF methodologies. Gather requirements using JAD facilitation techniques in order to collect and define data. Process requirements necessary to support client/server or web-based applications. Use modeling tools and repositories to effectively and efficiently define data and business process requirements. Designs relational database schemas for large-scale client/server or web-based applications that reside on database management system. Performs work that is reviewed in timely intervals as defined by the senior data analyst.

Provide deliverables within the time frames defined by appropriate personnel and reviewed often enough to ensure time frames and quality standards are met.

15. Data Analyst I

Provide low level expertise in information modeling, requirement analysis and facilitation using IDEF methodologies. Performs analysis to develop fully attributed logical information (data) and business process models following IDEF methodologies. Perform logical database designs (5-7 entities) to support the development of database schemas necessary to support small applications that reside on database management systems. Performs work with day-to-day supervision or guidance. Prepare deliverables in an iterative fashion that are reviewed until production ready and provided within the time frames defined by appropriate personnel.

16. Data Control Specialist

Coordinates tape library and data preparation activities including scheduling keypunching services, copying of keytapes, recording data in a PC database, etc.

17. Database Specialist II

Able to communicate with management, technicians, and end-users to evaluate needs prior to development of an automated solution. Capable of preparing detailed reports which might include system requirements such as concurrent usage factors, data storage requirements, response rates, and discuss procedures for processing data through the use of data base management systems (DBMS) including relational data bases. Able to discuss justifications for selection of mainframes, mini-computers or microcomputers as the host for the proposed system. Knowledgeable of available equipment environment to determine technical approaches, and to formulate appropriate solutions. Familiar with data structures, data structure within a DBMS, as well as the methods for defining data relationships. Able to evaluate data base design tradeoffs, performance levels, and space allocation requirements.

18. Database Specialist I

Able to communicate with management, technicians, and end-users to evaluate need prior to development of an automated solution. Capable of preparing detailed report which might include system requirements such as concurrent usage factors, data storage requirements, response rates, and discuss procedures for processing data through the use of data base management systems (DBMS) including relational data bases. Able to discuss justifications for selection of mainframes, mini-computers or microcomputers as the host for the proposed system. Knowledgeable of available equipment environment to determine technical approaches, and to formulate appropriate solutions. Familiar with data structures, data structure within a DBMS, as well as the methods for defining data relationships. Able to evaluate data base design tradeoffs, impacts on user expectations, performance levels, and space allocation requirements.

19.   **Data Entry Operator II**

Work from various source documents which may have been coded and which may require additional selecting, coding, or interpreting of data to be entered. Such work may require the application of experience and judgement in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be entered from a variety of source documents. Operates keyboard controlled data entry device such as a word processor or other CRT type device to transcribe data into a form suitable for computer processing. Operates word processing equipment to compile, type, revise, combine, edit, print and store documents. Reads instructions acccompanying material, or follows verbal instructions to determine format and content required. Checks completed document on screen for spelling errors, using software. Proofreads and edits document for grammar, spelling, punctuation and format. This work may also include hand correcting of data entry information. Verify or perform work involved in abstracting and/or coding information from schedules, questionnaires, reports, documents, and other written or printed material according to instructions and related codes involving words, numerical and alphabetical symbols. Work may entail formatting source material into documents such as reports, conference materials, or presentation handouts. As part of the process of handling th materials involved in data to be entered and maintained in computer files, this   position may involve: opening, sorting, marking, tabulating, and filing various documents.

20.   **Data Entry Operator I**

Operates keyboard controlled data entry device such as a word processor or other CRT type device to transcribe data into a form suitable for computer processing. Operates word processing equipment to compile, type, revise, combine, edit, print and store documents. Reads instructions accompanying material, or follows verbal instructions to determine format and content required. Checks completed document on screen for spelling errors, using software. Proofreads and edits document for grammar, spelling, punctuation and format. This work may also include hand correcting of data entry information. Verify or perform work involved in abstracting and/or coding information from schedules, questionnaires, reports, documents, and other written or printed material according to instructions and related codes involving words, numerical and alphabetical symbols. Work may entail formatting source material into documents such as reports, conference materials, or presentation handouts. As part of the process of handling the materials involved in data to be entered and maintained in computer files, this position may involve: opening, sorting, marking, tabulating, and filing various documents.

21.   **Graphics Specialist**

Conceptualizes, designs, and develops a wide variety of information materials (technical, promotional, informational), such as forms, labels, brochures, meeting and conference handouts, slides, posters, and other presentation aids. Designs other visuals such as logos, mastheads, and illustrations for articles in technical manuals, health journals, and other publications. Develops a system for scheduling and tracking requests for graphics/artwork to insure timely and efficient completion of all work products. Uses

advanced desktop publishing, page layout, or typesetting software to design and develop high quality textual and graphic compositions to communicate complex technical information.

22. **Graphical User Interface Designer**

Provides specialized expertise in the design and layout of graphical user interfaces particularly screen layouts and functionality for client-server applications (e.g. Microsoft Windows presentation screens). Conducts studies, testing and evaluation of screen prototypes for functionality, ease of use, efficiency, and accuracy.

23. **Hardware Technician II**

Organizes, supervises, directs, manages, and performs hardware installations and works as part of a team. Responsible for direct technical work on projects. Assists in on-site management of hardware support requirements and installations. Analyzes, and evaluates new hardware requirements and prepares specifications for hardware maintenance and upgrades. Develops hardware installation schedules. Mobilizes installation team. Coordinates pre- and post-installation operations and maintenance support, and documentation.

24. **Hardware Technician I**

Works independently, or as part of a team. Installs, operates, maintains, configures, troubleshoots, and repairs IRM systems devices, circuits, cables, components, software, end-user devices, and connectivity. Organizes, and performs hardware installations and technical work on microcomputers and laptop computers, and peripherals. Performs work based on hardware installation schedules. Configures computers, communications devices, and peripheral equipment.

25. **JAD Facilitator**

Assists group members of joint application design (JAD) teams formed in developing information system specifications and functionality to communicate their ideas, information, and opinions more effectively. Manages the JAD team meetings and workshops. Keeps the JAD team focused on the subject at hand to achieve objectives, assures discussions are brought to conclusion.

26. **Local Area Network (LAN) Administrator II**

Directs and manages network operation, maintenance, user support technicians, and engineers. Provides leadership and technical guidance for LAN support team members. Performs optimization of all hardware elements of the network facilities (including power, communications equipment, lines, modems and terminals), and systems testing and optimization of software components. Responsible for the managerial and technical administration of a LAN to include security, communications, software applications

including DBMS, electronic mail, printing services, outside communication links, UPS service, calendaring/scheduling services, license administration, file services, NOS service, backup services and any other initial trouble shooting. Performs all phases of LAN projects to provide maintenance and upgrading of networks and their related components. Analyzes vendor products to recommend those which best meet user needs. Installs network software.

27.   **LAN Administrator I**

Works independently or as part of a team to install and provide maintenance of LAN and LAN-related components. Performs server and workstation connection, configuration, integration, and testing. Upgrades system components as required. Provides support for desktop workstations, network fileservers, remote access servers, tape backup servers, communications gateways, and other processors. Performs software installations, integration, tuning, operation, initial user orientation to network, problem identification, tracking, and resolution support for software packages including DBMS, to include communication protocols. Monitors and oversees the functions of the entire network.

28.   **Meeting Support Technician**

Tests, maintains, repairs, sets up, and operates videoconferencing and other electronic and electrical equipment used in the conduct, transmission, or interfacing of meetings at single or multiple locations. Works with videoconferencing equipment, video projectors, microphones and sound systems, computer hook-ups, and other peripherals, such as slide and overhead projectors. Troubleshoots equipment and performs simple repairs or problem resolution. Determines when equipment needs major repairs or maintenance. Arranges for technical hook-ups with remote sites, e.g., scheduling events with videoconferencing coordinators. May perform work in video related areas such as videotaping, photography, database updates, or equipment research.

29.   **Network Engineer II**

Provides leadership and technical guidance for pool of LAN Administrators and Network Engineers. Provides expertise in installation, maintenance, and operational support of data networks primarily using utility fileservers and servers such as Novell-based or NT-based file and print servers and UNIX servers. Provides expertise for data communication network support staff for installing, maintaining, trouble shooting and correcting problems related to controllers, front-end processors, multiplexors, modems, data communication leased lines, bridges, routers, switches, Ethernet and token ring networks. Tests equipment and software, trouble shoots problems, works to resolve difficult technical issues, assists other technical staff with network problem resolution, and informs other staff of resolutions as appropriate. Monitors network use and adjust configurations and implements system enhancements to achieve optimal performance. Researches and obtains network administration tools for testing or team use as appropriate. Coordinates work efforts with network staff, LAN administrators, and vendors as applicable for optimum efficiency. Work conforms to all CDC and other federal government standards and requirements for network systems and security.

30. **Network Engineer I**

Provides technical expertise to other network support staff as well as support of a data network primarily using utility fileservers and servers such as Novell-based or NT-based file and print servers and UNIX servers. Provides data communication network support by installing, maintaining, trouble shooting and correcting problems related to controllers, front-end processors, multiplexors, modems, data communication leased lines, bridges, routers, switches, Ethernet and token ring networks. Provides technical assistance to other network and LAN staff as required. Coordinates work efforts with network staff, LAN administrators, and vendors as applicable for optimum efficiency. Work conforms to all CDC and other federal government standards and requirements for network systems and security.

31. **Network Specialist**

Provides support for data networks primarily using utility fileservers and servers such as Novell-based or NT-based file and print servers, UNIX, Exchange, and Application servers. Provides data communication network support by installing, maintaining, trouble shooting and correcting problems related to controllers, front-end processors, multiplexors, modems, data communication leased lines, bridges, routers, switches, Ethernet and token ring networks. Provides technical assistance to other network and LAN staff as required. Coordinates work efforts with network staff, LAN administrators, and vendors as applicable for optimum efficiency. Work conforms to all CDC and other federal government standards and requirements for network systems and security. technical assistance to other network and LAN staff as required. Coordinates work efforts with network staff, LAN administrators, and vendors as applicable for optimum efficiency. Work conforms to all CDC and other federal government standards and requirements for network systems and security.

32. **Production Control Coordinator**

Provides control and coordination of production jobs submitted to the batch processing environment. Schedules jobs, submits jobs, monitors job execution, logs problems with job execution, notifies programmers of problems, and takes standard corrective actions when jobs fail to execute properly.

33. **Public Health Analyst**

Oversees and develops data management systems, including computer programs to monitor data quality, (SAS, MS ACCESS, MS Excel); communicates with project areas regarding study activities and protocol; analyzes data for reports, presentations and publications; assists in the review of study data for data quality; organizes study files, including data and correspondence files (MS OFFICE); WordPerfect); performs scientific, medical and research literature searches in fields including but not limited to Behavioral Anthropology, Psychology, and Epidemiology and prepares slides for scientific presentations (MS Powerpoint).

34. **Quality Assurance and Quality Control (QA/QC) Specialist**

Provides an overall management function that determines, defines, and implements QA/QC policies, programs, and procedures. Uses analytical tools to quantitatively measure quality, reports on findings, and makes recommendations on changes to meet specifications and quality standards.

35.   Scientific Data Manager

Provides high level expertise in the medical or laboratory discipline to collect, abstract, code, analyze, or interpret scientific data contained within information systems and databases related to public health.

36.   Systems Analyst III

Provides high level expertise in developing complex software applications involving new technologies, methods, concepts or approaches. Provides supervisory, technical, and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and for progress in accordance with schedules. Coordinates with Program Manager and CDC officials to ensure problem resolution and user satisfaction. Prepares and delivers presentations on the system concept to colleagues, subordinates and user representatives. Formulates statements of management, scientific and business problems, and devises procedures for solution of problems by use of automated data processing. Applying analytical skills and a variety of ADP technology, performs required analysis of information management and data requirements, of practical alternative approaches, and design of ADP systems. With the assistance of other analysts and programmer/analysts, also develops test plans, procedures and data, and evaluates system effectiveness and efficiency. Manage and direct project teams composed of specialists, analysts, and programmers. Meets with Project Officer or technical monitor and other cognizant personnel to review requirements, discuss technical approaches, and to formulate plans for technical support. Performs required detail analysis of information management and data requirements.

37.   Systems Analyst II

Provides development services for relatively complex applications using standard approaches or less complex systems using new approaches. Analyzes requirements for ADP support. Designs and documents a data system to accomplish system required functions in an optimum manner. Develops plans for ADP systems from project inception to conclusion. Analyzes the problem and the information to be processed. Defines the problem in writing. Specifies computer programs and functions that meet the system design with efficiency and ease of maintenance. Develops computer programs in a suitable language in conformance with programming standards. Provides technical guidance to other project members and serves as task leader on smaller tasks. Additionally, designs programs and prepares flow charts and diagrams that indicate mathematical computation and sequence of machine operations. Also verifies accuracy and completeness of programs by preparing sample data and coordinating test runs made by operating personnel. Correct program errors by revising instructions or altering

operating run procedures. Evaluates and modifies existing programs to take into account changes in procedures or type of reports desired. May be required to use concepts generally associated with fourth generation equipment and languages.

38.   Systems Analyst I

Provides entry level systems development support using standard approaches. Devises and prepares layouts for computer systems requirements and develops procedures to process data by means of ADP equipment. Confers with other technical personnel to determine problems and type of data to be processed. Analyzes a problem in light of equipment capability to determine technical approach. Formulates solutions to identified/software needed for their solution. Writes specifications for each program or portion thereof. May be required to develop and implement applications utilizing mathematical and statistical formula.

39.   Systems Engineer II

Provides installation, maintenance, and operational support of specialized programming and database software such as software engineering tools, DBMS's, etc.

40.   Systems Engineer I

Provides data communication network support by installing, maintaining, trouble shooting and correcting problems related to controllers, front-end processors, multiplexors, modems data communication leased lines, LAD circuits, bridges, routers and token ring networks. Monitors and oversees the functions of the data network using such tools as NETVIEW, OMEGAMON, and TSO screens. Alerts users of potential problems on the network and initiates procedures to correct faults before they become major problems. Monitors the activities on the mainframe computer with a major emphasis on remote communications. Writes systems programs (CLISTS) and develops routines for automating computer and console operations. Develops reports on network utilization. Develops and writes operating procedures for system operators. Acts as a resource person to shift operators for optimizing the computer for peak efficiency and assists in resolving problems unfamiliar to the operator. Extensive knowledge of the various components of the data communications, systems diagnostics, standard operating procedures, and communication standards is required.

41.   Systems Programmer III

Provides high level of experience and expertise in implementing and maintaining IBM MVS/ESA and UNIX operating system software, new hardware technology, methods, concepts or approaches. Provides technical, and administrative direction for personnel performing systems programming tasks at lower skill levels, including the review of work products for correctness, adherence to standards, and for progress in accordance with schedules. Maintains knowledge of technological advances in both hardware and systems

software, awareness of other software efforts being planned, and makes recommendations to CDC for implementation of system software changes. Performs detailed software and hardware monitoring as needed. On the basis of studies conducted, makes recommendations in the area of systems standards and procedures, and all changes to the system software and hardware configurations to achieve maximum overall system performance and effectiveness. Plans and carries out the installation and unit testing of highly complex operating systems, communications software, utility programs, language compilers, data management software, and other general use programs.

42.   **Systems Programmer II**

Provides expertise in planning, installing, maintaining, tuning, developing and using for large and highly complex programs that comprise major segments of IBM MVS and/or UNIX operating software, which may include operating system control programs, online interactive systems, production management systems, data storage management systems, computer hardware reliability tracking systems, computer resource accounting systems, security software, etc. Troubleshoots problems and implements changes in assigned area. Diagnoses system failures to isolate the source of problem between hardware, system software, and application software. Modifies code as required when the problem is determined to be in assigned area of responsibility and advises responsible software vendor as appropriate. Works with software vendors to document problems and develop/implement problem resolutions. Investigates factors such as amount of storage consumed, access time statistics, CPU utilization, unusual problems encountered, and recommends changes and improvements in areas of responsibility. Consults with and provides guidance to application programmers and/or end-users in the use of system software components, job control language, and procedures. Develops guidelines, written recommendations, and standard operating procedures in the use of assigned system software components.

43.   **Systems Programmer I**

Installs, maintains, and performs modification tasks for assigned segments of systems software. Troubleshoots problems occurring in assigned software. Diagnoses systems failures to isolate source of assigned software and/or notifies responsible software vendor as appropriate. Maintains a sample set of programs that can be used to test the effects of modifications to assigned systems software.

44.   **Technical Automation Specialist**

Provides highly technical expertise and guidance for performance of tasks concerning use of microcomputer hardware and software. Has expertise in advanced, integrated or highly complex microcomputer systems or in selected microcomputer specialties. Areas of application include design, implementation, and operation of office automation systems utilizing state-of-the-art hardware and software components and interfacing them into the current environment. The result would be a faster more comprehensive network of resources. Provide hardware/software problem resolution for user assistance. Defines

the problem in writing. Specifies computer programs and functions that meet the system design with efficiency and ease of maintenance. Develops computer programs in a suitable language in conformance with programming standards. Provides technical guidance to other project members and serves as task leader on smaller tasks. Additionally, designs programs and prepares flow charts and diagrams that indicate mathematical computation and sequence of machine operations. Also verifies accuracy and completeness of programs by preparing sample data and coordinating test runs made by operating personnel. Correct program errors by revising instructions or altering operating run procedures. Evaluates and modifies existing programs to take into account changes in procedures or type of reports desired. May be required to use concepts generally associated with fourth generation equipment and languages.

45. **Technical Information Specialist**

Performs work concerned with analyzing, summarizing, and coding the intellectual content of scientific, medical, technological, or other specialized information related to developing or maintaining scientific information systems, including acquisition, analysis of subject content of the documents acquired, indexing and preparation of abstracts or extracts. Develops thesauri, list of descriptions, subject heading lists, etc. Analyzes questions from users and performs literature searches; prepares replies in the from of documents, bibliographies, or specific answers to query. Directs, administers, or coordinates technical information services related to information systems. Work may include the special techniques, methods, and devices of a semi- or fully-automated documentation system.

46. **Technical Writer/Documentation Specialist**

Provides technical writing for program and operational documentation. Provides documentation in presentation-ready quality output using advanced word processing or desk top publishing software.

47. **Tester**

Participate in system design efforts. Produce test plan documents for client/server applications. Create test requirements documents. Create and run test scripts. Comile test scripts into test procedures. Run regression tests. Complete manual checklists for client/server applications. Track status of defects. Create manual test scripts for mainframe applications.Coordinate distribution of applications. Provide quality assurance testing for all systems developed by CDC to ensure the development and distribution of quality products. Assists with roll-out of systems documentation. Develop formal application test plans and test requirements documents as required. Develop automated test scripts and test procedures using client/server testing tool. Produce manual checklists document as required. Produce lists of defects that are to be versioned to future releases of application as req uired. Communicate with analysts and programmers about formal testing plans, problems, and results. Develop technical documentation and reports.

48.   Training Specialist II

Proficient with all LAN based software available to users including those developed in-house, conducts the research necessary to develop and revise training courses and prepares appropriate training catalogs. Maintains relationship with users to continually determine training and user support needs. Develops all instructor and student materials. Trains personnel by conducting formal classroom courses, workshops, seminars, and/or computer based/computer aided training.   Provides daily supervision and direction to training and user support staff.   Using extensive knowledge of LAN based software, supports users of information systems following the established organizational procedures, and provides documented user support databases. Designs and implements user support help systems for applications developed in-house.

49.   Training Specialist I

Formulates statements of training problems based on needs assessment, and devises procedures for the solution of these problems using proven training techniques. Designs, develops, and implements the curriculum. Evaluates and selects appropriate training techniques and media. Develops training evaluation methods, and conducts training sessions. Proficient with all LAN-based software available to users, including those developed in-house, formulates statements of training based on needs assessment, and devises procedures for solutions using proven training techniques. Designs, develops, and implements the curriculum. Develops training evaluation methods, prepares student and instructor materials, and conducts training sessions. Using extensive knowledge of LAN based software, supports users of information systems following the established organizational procedures, and provides documented user support database(s).

50.   User Relations Specialist

Able to communicate with CDC clients and collaborators, nationally and internationally, to evaluate opportunities to apply CDC information technology resources for data collection, communication, management, analysis, and information dissemination in support of public health. Capable of preparing and delivering sophisticated presentations to diverse audiences. Familiar with information systems strategic planning, implementation, distribution, and user support. Travel to user's sites to assist in the implementation or installation of CDC developed or supplied information systems products and services may be required.

51.   User Support Specialist III

Supports users of desktop hardware and software on the CDC standards list as well as resolving user account and LAN access problems by triaging calls, researching complex problems and questions, responding with answers or interventions, providing on site assistance, tracking calls, analyzing call data for trends and common system problems,

and evaluating the quality of information systems through user support call data. May serve as Help Desk Manager providing daily supervision and direction to staff who are responsible for phone and in-person support to users. These personnel serve as the first point of contact for troubleshooting hardware, software, networks, peripherals, etc. problems. May act as a resource for solutions for more complex questions presented by escalation procedures from User Support Specialist I and II. Provides technical writing for program and operational documentation. Provides documentation in presentation-ready quality output using advanced word processing or desk top publishing software. The User support could encompass workstations running WIN95, Windows NT, Unix OS, or MacIntosh OS or as required by the task.

52.   **User Support Specialist II**

Supports users of information systems and desktop hardware and software on the CDC standards list as well as resolving user account and LAN access problems by triaging calls, researching moderately complex problems and questions, responding with answers and interventions, providing on site assistance, tracking calls, analyzing call data for trends and common system problems, and evaluating the quality of information systems through user support call data. May serve in help desk capacity providing phone and in-person support to users in the areas of hardware, software, peripherals, etc. problems; and serves as the initial point of contact for troubleshooting and resolving these problems. Provides technical writing for program and operational documentation. Provides documentation in presentation-ready quality output using advanced word processing or desk top publishing software. The User support could encompass workstations running WIN95, Windows NT, Unix OS, or MacIntosh OS or as required by the task.

53.   **User Support Specialist I**

Supports users of desktop hardware/software on the CDC standards list by triaging calls, researching standard and less complex problems and questions, responding with answers or interventions, providing on site assistance, tracking calls, and analyzing call data for trends and common system problems. May serve in help desk capacity providing phone and in-person support to users in the areas of hardware, software, peripherals, etc. problems; and serves as the initial point of contact for troubleshooting and resolving these problems. The user support could encompass workstations running WIN95, Windows NT, Unix OS, MacIntosh OS, or as required by the task.

54.   **Videoconferencing Specialist II**

Supports and coordinates the Videoconferencing at CDC/ATSDR. Assist users in trouble resolution in case of difficulties in establishing a connection for a video conference. Assists in the installation of new videoconferencing units by ensuring that the bandwidth is available, that the T1 Nodes have the capacity to accommodate additional demands, that Patch Panels, cables and any associated equipment are adequate, and that the rooms

are properly wired for video. Assists in isolating problems and restoring videoconferencing services. Monitor the WAN (videoconferencing and data) and maintain databases used in LAN monitoring, management and troubleshooting.

55.   **Videoconferencing Specialist I**

Provides videoconferencing services for various CDC groups including local and remote centers and offices (CIOs). Receives requests for videoconferencing services from CDC staff or videoconferencing staff, schedules events with videoconferencing coordinators, works with requesters concerning meeting requirements, sets up and tests equipment including peripherals, trains users as necessary, handles controls or peripheral equipment for high-profile meetings, breaks down and stores equipment between uses, and provides audiovisual assistance as requested. Uses computer equipment and software for E-mail, videoconferencing scheduling, word processing, spreadsheets, databases, or Internet access. Attends videoconferencing facilitator meetings and annual refresher seminars. May perform work in video related areas such as videotaping, photography, equipment maintenance, database updates, or equipment research.