Epidemiologist 2, Electronic Laboratory Reporting (ELR)

Position Description:
Are you looking for a dynamic, exciting, and challenging position in the field of public health informatics? Then join the Surveillance Systems & Informatics (SSI) Program at the Tennessee Department of Health (TDH)! TDH is currently recruiting for an Executive Service Epidemiologist 2 position, with the SSI Program, in the Communicable and Environmental Diseases and Emergency Preparedness (CEDEP) Division. This position will report directly to the SSI Program Director, and collaborate closely with the Electronic Laboratory Reporting Specialist.

The CEDEP Division is responsible for conducting communicable and environmental disease surveillance, including for foodborne, hepatitis, TB, healthcare-associated, vaccine-preventable, HIV, sexually-transmitted, and vectorborne/zoonotic diseases. The SSI program is responsible for supporting the communicable disease surveillance systems (the NEDSS Base System, PRISM, and eHARS), administering REDCap, electronic laboratory reporting, electronic laboratory and case reporting, syndromic surveillance, and meeting the division surveillance and informatics needs. The primary focus of this position is to support the electronic laboratory reporting program. Electronic laboratory reporting involves public and laboratory collaboration to send laboratory reports on reportable diseases to the health department electronically, and according to a standard and surveillance system requirements. These data are transmitted in an electronic message format, and then transformed in the surveillance systems for communicable disease investigators to act on for the public health investigations.

Responsibilities:

- Develop and maintain effective professional relationships with laboratory reporting partners, public health professionals, and the information technology team.
- Conduct onboarding of laboratory partners, including establishing transport, reviewing test messages, validating message batches, providing feedback to laboratory partners on message content and structure issues, and providing technical assistance or support.
- Utilize, test, and update message validation tools, including those in Rhapsody and SAS, according to the standard, implementation guide, and surveillance system requirements.
- Import messages into a SQL database, maintain and develop the SAS code to evaluate those messages, and review and act on the error reports created by the SAS code; write queries in SQL and/or SAS.
- Utilize the SQL database to maintain and develop data quality dashboards in Tableau for internal use and external use; publish the dashboards on the server; maintain ongoing communications with laboratory partners regarding data quality.
- Co-lead electronic laboratory reporting meetings with internal team members and laboratory...
partners, creating appointments, developing agendas, taking and maintaining minutes and an ongoing issues list, and coordinating problem-solving discussions.

- Create and update standard operating procedures for internal and external processes, such as for data management and message validation.
- Create and maintain a project management plan utilizing web-based collaboration tools to manage onboarding activities for each laboratory partner, and for the program as a whole.
- Provide training and technical assistance to communicable disease program epidemiologists and investigators for public health laboratory reporting requirements, electronic laboratory reporting, and laboratory reporting processes in the surveillance systems.
- Represent TDH and SSI on national calls with other jurisdictions and CDC, participate in writing grant progress reports and narratives, and support other SSI initiatives, such as public health surveillance and electronic case reporting.

 Abilities:

- Detail-oriented, highly organized, able to multitask and prioritize, confident in managing projects, and able to self-direct on tasks.
- Excellent interpersonal skills, including listening, and oral and written communication skills to: collaborate with internal and external partners; liaise between partners with differing levels of technical understanding; bridge gaps in understanding by providing education and technical assistance.
- Highly self-motivated, a strong work ethic, and positive attitude; independent worker and contributing teammate.
- Strong critical and systems thinking skills to solve problems and innovate; dedicated to improving the effectiveness and efficiency of work processes and systems.
- Passionate about lifelong learning, developing themselves and others.

 Knowledge and Experience:

- Conducting active and passive public health surveillance for communicable diseases utilizing electronic surveillance systems, managing and analyzing surveillance data, and participating in cluster and outbreak investigations.
- Applying the HL7 version 2.X message standards and the electronic laboratory reporting implementation guide to electronic laboratory reporting for public health.
- Designing, testing, and implementing electronic public health data systems; applying informatics principles for standardized vocabulary (e.g., LOINC and SNOMED), transport, and interoperability between systems.
- Direct experience with the manual laboratory reporting process for surveillance, laboratory information management systems, and laboratory test types/methods and results.
- Writing standard operating procedures, user guidance, and workflows for electronic laboratory reporting or related electronic data interchange activities.

 Skills:

- Proficiency in SQL (Structured Query Language) Server Management Studio, SAS and R, for creating views or tables, data cleaning and manipulation, and validating electronic laboratory reporting messages.
- Proficiency developing and publishing Tableau visualizations on a server for internal and external partners.
• Proficiency managing complex projects, with different timelines and resources, simultaneously, and to accomplish short and long range objectives ahead of schedule.

**Minimum Qualifications:**
Education and Experience: Graduation from an accredited college or university with a doctorate's degree in epidemiology.

OR

Education and Experience: Graduation from an accredited college or university with a doctorate's degree in medicine (MD), osteopathic medicine (DO), veterinarian medicine (DVM) public health, biostatistics, statistics, health informatics health sciences, biomedical sciences or environmental sciences with experience equivalent to two years' work experience in epidemiology.

Substitution of Education for Experience: Additional graduate coursework in public health or an Epidemic Intelligence Service (EIS) Fellowship may substitute for the required experience on a year-for-year basis to a maximum of two years.

OR

Education and Experience: Graduation from an accredited college or university with a master's degree in epidemiology, public health, biostatistics, statistics, or health informatics with experience equivalent to four year's work experience in epidemiology.

Substitution of Education for Experience: Additional studies with an Epidemic Intelligence Service (EIS) Fellowship may substitute for the required experience on a year-for-year basis to a maximum of two years.

OR

Education and Experience: Graduation from an accredited college or university with a master's degree in health science, biomedical science or environmental science with experience equivalent to six year's work experience in epidemiology.

Substitution of Education for Experience: Additional studies with an Epidemic Intelligence Service (EIS) Fellowship may substitute for the required experience on a year-for-year basis to a maximum of two years.

**Desired Qualifications:**
• Three (3) years of experience applying technical standards (HL7 standards and the implementation guide, LOINC, and SNOMED) and informatics principles to electronic public health data systems, including for electronic laboratory and case reporting or syndromic surveillance.
• Experience designing, testing, and implementing interfaces for electronic data interchange.
• Certification in the HL7 Version 2.X messaging standards.
• A strong working knowledge of the electronic laboratory reporting implementation guide, and
experience conducting electronic laboratory reporting for public health reporting.

- Experience writing original code in SQL Server Management Studio, SAS, and R for creating tables and views, and data cleaning and manipulation.
- Project Management and/or Business Analyst certification and experience.
- Experience conducting public health surveillance, and managing and analyzing surveillance system data.
- Excellent interpersonal skills, including verbal communication skills for collaboration and written communication skills for documentation and training.

**Organization Description:**

**How to Apply:**
Candidates should apply online at [https://is.gd/SSIPCandidateScreening](https://is.gd/SSIPCandidateScreening), and upload a cover letter, resume, and writing sample. Candidates should complete the supplemental questions with thorough and detailed responses. Applications will be accepted until the position is filled. Please direct questions to [CEDS.Informatics@tn.gov](mailto:CEDS.Informatics@tn.gov).

**Additional Information:**
The Epidemiologist 2 is a full time Executive Service position. Minimum salary is $5,482 monthly, depending on education and experience, with a standard benefits package. No relocation assistance is available. The Tennessee Department of Health is an equal opportunity, equal access, affirmative action employer. Candidate must be eligible to work in the United States.

Degrees must be from an accredited college or university. A transcript evaluation is required for degrees earned outside of the United States.