

SAS Training for STD Grantees

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Background

STDs as a whole represent a significant health burden in the United States. Gonorrhea and Chlamydia are the notifiable diseases most commonly reported to CDC. Collection, monitoring, and reporting of STD data represents a substantial effort for state and local health departments. In this era of decreased funding for public health, it is critical for local and state STD program staff to enhance their proficiency in the use of data analysis tools in order to efficiently and effectively use STD surveillance data for programmatic decision-making. SAS software is well suited to perform these tasks and SAS software products are now available from CDC at no-cost to state and local STD grantees. To help meet this need, the Division of STD Prevention at CDC has developed SAS training for STD grantees. SASSI can be accessed at www.cdc.gov/std/sassi/.

Course Development

The unifying theme of this project was to develop a training which is relevant to STD prevention activities. Several steps were taken to ensure this. This included creating data sets for the training which closely mirror STD-surveillance in content, variable definition, and distribution of values. These data are used in all exercises and example programs in all sections of the training manual. Additionally, the SAS code was designed to be as useful as possible for STD-surveillance programs. When possible, real examples of reports and analysis used by STD-surveillance programs were incorporated into the training. State and local STD program staff were engaged at all phases of development to help ensure relevance to the target audience.

Web-based delivery was selected to maximize the potential participation by CDC-funded STD-surveillance grantees and minimize the cost: online delivery means that there are no limitations to number of pupils and no need for trainers or students to travel. To make the training useful to users at all levels of experience, each module is designed to stand alone.

The core design and development team consisted of a curriculum designer, SAS programmers, and STD Program staff. A multi-step process was used to develop the curriculum. First, the curriculum designed engaged the stakeholders by conducting structured interviews to identify the needs of state and local STD programs and their employees regarding SAS data management and analysis training. Information from these interviews was used to develop content for training. Content development was led by the curriculum designer, who did not have a SAS programming background, and did her best to translate SAS jargon into language more understandable for non-programmers. After internal review by SAS programmers at CDC, usability testing and learning assessments were conducted with selected state and local STD program staff.

Description of Course Content

The initial course is divided into 10 modules, which are accessed through the SASSI main page (see figure 1). Each module should take between 45 and 90 minutes to complete and is designed to stand alone. Tip sheets are provided for all modules and SAS programs and data sets are provided for those modules that cover SAS programming topics. A systematic and standardized approach is used to unify the courses. Modules start with an introduction, which describes the topic and provides advice on taking the course. Figure 2 shows the first intro page. This is followed by explanatory narrative woven together with examples, assessments, practice problems, and reminders about syntax covered in earlier modules. An example page and pop quiz page are shown in figures 3 and 4. The modules end with learning assessments. After successfully completing a module, users are allowed to print a certificate of completion. The modules are divided into 3 sections: 3 modules comprising an introduction; 4 modules describing how to manage and manipulate data; and 3 modules which cover analysis and report generation.

Figure 1: SASSI Main Page



Figure 2: Module Intro

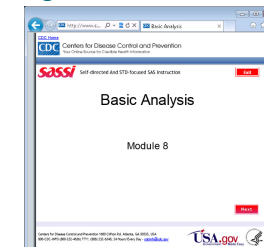


Figure 3: Content Page

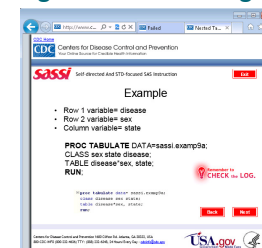
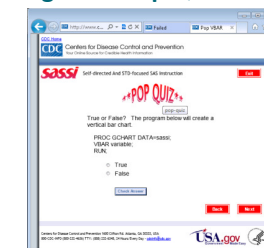


Figure 4: Pop Quiz



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