EVALUATION OF FOOD-SERVICE SANITATION PROGRAMS

WILLIAM F. BOWER

Milk and Food Branch,
Division of Environmental Engineering and Food Protection,

One of the major problems confronting health departments today is the problem of program evaluation. Evaluating a program means, simply, determining how good a job has been done. It is a process of judging the worth of an enterprise according to some definite set of values.

Evaluation is an essential part of program administration and administrators of food-service sanitation programs who neglect it risk program decay. Its chief purpose is to point the way to progress. It enables us to make our work more effective—it provides a means to test our goals, our methods and our procedures against needs and accomplishments, and to change them in the light of our findings. It provides a sound basis for future planning and aids in obtaining needed supportive facilities and equipment, in promoting necessary budget support and, where necessary, in upgrading the qualifications of program personnel.

One form of evaluation is going on all the time. The public, as well as the public health agencies, either consciously or subconsciously, are continuously making judgments about the worth of the food-service sanitation program. They either are making complaints about it or are paying it compliments. We need to be sensitive to these “judgments.” It is true that occasionally the public is not properly informed, has “an axe to grind” or has a complaint based on some reason other than the reason given. Nevertheless, experience has indicated that more often than not their complaints or comments are worthy of investigation.

In recognition of the importance of systematic evaluation in the development and maintenance of effective food protection programs, the Public Health Service has developed a tentative “Procedure for Evaluating Food Service Sanitation Programs.” It is widely accepted that, to be effective, a procedure must be based on a specific standard. It is through measuring deviations from a known standard that progress or regression in a program can be determined. The Procedure under discussion is based on the 1962 “Food Service Sanitation Ordinance and Code” which is a recognized national standard relating to food-service establishments.

The new Procedure is significantly different from the previous Public Health Service eating and drinking establishment rating methods, as will be shown in the following discussion. Greater emphasis was placed on the administrative aspects of the food-service sanitation program in the 1962 “Food Service Sanitation Ordinance and Code,” so in the evaluation Procedure it is necessary that the criteria established take into account this important program aspect. In this connection, a more objective evaluation of administrative considerations may be achieved through the use of questionnaire type forms and through suggested items included in the Procedure, which will provide a basis for determination of program quality under each item.

The “Procedure for Evaluating Food Service Sanitation Programs” is broken down into two parts—Food-Service Establishment Data and Program Operations Data. Since both of these parts are very essential to a good operating program, they will be considered in more detail in this discussion.

Under this Procedure, the Food-Service Establishment Data is collected through the inspection of a statistically representative number of a community’s food-service establishments. The sample is selected at random from the total number of establishments in the community. The establishments selected are inspected and the significant deviations from the sanitary requirements contained in the 1962 “Food Service Sanitation Ordinance and Code” are noted on the inspection sheet. These deviations are subsequently tabulated on a master sheet, the demerit scores determined, an average demerit score is calculated, and from the graph which will be included in the Procedure, a numerical score is recorded.

Other than a more specific and complete breakdown of sanitation requirements on the inspection sheet and the use of demerit scores, the field procedure for this part of the evaluation does not vary too much from previous survey procedures recommended by the Public Health Service.

---

GUIDE LINES FOR EVALUATING CREDITS

However, the part in regard to Program Operations Data is a much newer concept. As many of you will recall, the administrative aspects in previous rating methods consisted of sixteen broad items with points assigned, under the title of “Enforcement Methods.” There were not, however, any written instructions or guide lines established as to how to make a judgment in awarding of the point credits under each individual item. This is not the case under the new Procedure.

The Program Operations Data is broken down into several subparts. They include: Interpretation of Requirements, Administrative Procedures, Staff Training, Industry Training, Public Information, Program Support, Plan Review, Supportive Facilities and Measures, and Food-Service Establishments Outside the Jurisdiction of the Health Authority. Credit points are assigned to each subpart.

In the first subpart, Interpretation of Requirements, previous inspection records of the establishments surveyed in the evaluation will be reviewed to determine if violations are being consistently and accurately reported. Each significant violation should be recorded on the inspection sheet each time it occurs. The concept of significant violations will be discussed with the person accompanying the survey officer to determine if he is in agreement with the interpretation of the violations that were noted on the survey.

The second subpart, Administrative Procedures, takes into account the health authorities' procedures, including administrative or enforcement actions, to secure compliance with the 1962 “Food Service Sanitation Ordinance and Code.” The last two inspection reports on those establishments in the sample are retrieved from the health department records and are reviewed for completeness of information, neatness, legibility and orderliness. Unless the inspection report is complete and legible, the restaurant operator has no way of knowing what he must do in order to comply with the sanitation requirements.

The dates on these two inspection sheets are also noted. The Ordinance and Code states that there must be at least one official inspection each six months. This is a minimum. Most health jurisdictions will find that a greater frequency of inspections will be desirable to achieve satisfactory compliance. It will also be determined from the records what action, if any, the health authority is initiating for successive violations of the same item of sanitation, or for violations that need prompt action — those where a serious health hazard may be involved if the deficiency is not corrected.

Staff Training is the third subpart. Continuous training of all food sanitation personnel is necessary to develop and maintain staff competencies. The food industry is undergoing a “product explosion in that roughly 80% of the convenience foods now available were not on the market some 15 years ago. The sanitarians must keep themselves knowledgeable in these new products, new processes, and new equipment. Staff training can be accomplished through short courses, seminars, professional meetings, staff meetings, conferences, joint inspections with trained personnel, viewing training films and through self-education activities. Textbooks, reference materials, trade and professional journals should be readily available for staff use.

Experience has shown that if food-service employees understand why they are to do certain things, why foods should be refrigerated, why utensils and dishes should be cleaned and sanitized, they are more likely to do it in the correct manner. This type of reasoning is behind the fourth subpart, Industry Training. The health authority has the obligation to point out the public health responsibilities of industry personnel and cooperate with them in solving problems, but should not assume responsibility for the training of food-service employees. It should, however, assist management in training the employees. The attitude of management has a great bearing on the effectiveness of the sanitation practices in the establishment — even on the attitude his employees have toward correct sanitation practices. In evaluation of this subpart, the health authorities' efforts to assist industry through formal or informal training, instructions during inspections, distribution of printed or written information, and assisting in the training of food-service personnel will be checked.

PROGRAM SUPPORT

Public Information, the fifth subpart, is an important phase of health department operations. Unless the public is aware of the needs, goals, and values of food sanitation, how can they be expected to give public understanding or the program the support necessary to achieve a high level of food protection? Under the proposed Procedure, the survey officer will review the methods utilized by the health authorities in dissemination of information, such as releases to radio, television, press and talks to civic, fraternal and professional organizations. The releases, for example, could take the form of health department activities in food sanitation, warnings on types of food to be avoided on picnics, new ideas in food sanitation, or the reasons for certain requirements. These releases, of course, should not be a “one-shot” affair, but should be on a regular, continuing basis. Only in this manner of keeping the public adequately informed can a health department
hope to secure support either in adopting correct sanitation viewpoints or in budgetary considerations.

The sixth subpart, Program Support, is probably the most difficult area in which to arrive at a judgment. This area is concerned with the priority being given the food sanitation program in relation to the other programs for which the sanitarian is usually responsible, and the adequacy of the budget to meet the program needs. Included in this component would be, among other things, provision of an adequate number of competent program personnel, sufficient funds for all necessary travel, materials, printing, books and journals, technical equipment and other essentials to program operations. The analysis of measures being used to develop and maintain a suitable level of program support should be considered, including budget requests and utilization of personnel.

"Built-in sanitation" is one of the newer concepts of an efficient, well operated restaurant. In the seventh subpart, Plan Review, this is taken into consideration. To insure compliance with sanitary requirements, to prevent any misunderstanding by the operator as to what is required, and to prevent errors which might result in additional cost to the operator, the health authority should require the submission of properly prepared plans and specifications for all new or extensively remodeled establishments before such work is begun. These plans should be reviewed and approved by the health authority. Credit will be given this item according to the extent to which plans are being required and reviewed.

In the subpart on Supportive Facilities and Measures, it is recognized that a food-service sanitation program may be effectively administered by well qualified personnel, yet may not have the equipment necessary to do the job or the facilities necessary to adequately implement the program. Adequate planning must be undertaken, in advance, to handle both routine and emergency services. In the evaluation of this portion of the data, the survey officer will note if a laboratory is available within a reasonable distance, which has the capability of performing microbiological analyses to identify the genera of the several microorganisms important to food sanitation, and qualitative analysis for chemical contaminants and adulterants. Whether the laboratory is used by the health agency also will be checked.

There should be a plan, known to the entire staff, in regard to the investigation and reporting of foodborne illness. For instance, the secretary in the health department receives a call stating that a number of persons are ill shortly after having a meal at "X" establishment. Does she know the individuals who must be contacted to get the investigation under-way immediately? What about the procedure for the actual investigation — is there a prepared kit for collecting samples, who interviews the persons exposed to the possible illness, how are the samples collected, where are the collected samples sent, how are they sent, and how long will it take the samples to arrive and bacteriological or chemical tests conducted? By reviewing the files and by asking questions it will be determined how previous foodborne disease outbreaks were handled and if they were reported to the next higher administrative level.

It has been surprising to learn that quite a number of health authorities either do not have or do not use such basic equipment as indicating and maximum registering thermometers, chemical test kits, light meters, water pressure gauges, inspection forms, flashlights and other items of field equipment that are essential to making a thorough inspection of a food-service facility. This particular problem will be taken into account during the evaluation.

The last subpart under the Program Operations Data of the Evaluation Procedure relates to an emerging problem, that of Food Service Establishments Outside the Jurisdiction of the Health Authority. While twenty years ago most potentially hazardous foods were produced at the site of consumption or at least in the same city of general area, during the past few years the preparation of food supplies at a central point for shipment to distant areas has grown tremendously. It is not unusual for a dairy or bakery to be located in one State, which serves restaurants in two or three surrounding States. Time or finances would not permit the routine inspection of these facilities by each health authority which is being served by those businesses, nor should this be necessary. However, the health authority should assure himself that any food being received from any food-service establishments not under his routine inspection (1) operates under regulations substantially equivalent to those in the Ordinance and Code, (2) is under routine official supervision, and (3) that the sanitation practiced in those establishments is at least equal to that of the community receiving the products. During the evaluation of this subpart, the survey officer will discuss the procedures that have been established by the health authorities to permit acceptance of reports from responsible authorities in other areas where such food-service establishments are located.

Measurement of Program Quality

Through the use of the questionnaires and guide lines in the Procedure, a credit point total has been established for each of the nine subparts discussed. The total credits awarded will be added, and this value will be reported as the Program Operations Data Numerical Score.
There are now two scores—the Food-Service Establishment Average Demerit Score and the Program Operations Numerical Score. The scores by themselves have only limited meaning, but are an index to the quality of the total food-service sanitation program. As an index, they are useful in identifying a range of program quality. Although each of the scores will be reported as whole numbers, they will be identified as a Sanitation Level and an Administrative Level. The score ranges for the various levels will be clearly identified in the Evaluation Procedure.

As with any investigation, inspection, or evaluation, the work accomplished or the things that should be accomplished, must be brought together into a written report. This report should clearly identify the community or jurisdiction evaluated, the official agency responsible for the program, the Numerical Scores and Program Level achieved, and the program characteristics which contributed to achieving the scores and level, as well as those components which need strengthening. In this connection, specificity must be the rule rather than the exception. The program deficiencies must be clearly identified and recommendations for correction of these deficiencies should be presented in a constructive manner so the responsible administrative officials may use them for program improvement.

Report writing is not a simple or easy task, but it is probably the real key as to how effectively the results and recommendations determined in the evaluation will be implemented. For this reason, each evaluation report must be an “individual report.” It cannot be a “form” where numbers and statistics are merely entered. Stereotyping should be avoided if the report is to be effective.

It cannot be emphasized too strongly the care that should be exercised in conducting an evaluation and in summarizing the results. You would be amazed at the mathematical errors—those of simple addition and subtraction—that “creep into” the reports. Carelessness on just one or two items can detract greatly from the effectiveness of the report.

At this point it might be well to discuss briefly the type of person who should make such program evaluations. In order to use these new criteria in an acceptable manner, it is important that the survey officer be a well qualified professional sanitarian, engineer, veterinarian, or other environmental health specialist who has demonstrated a high proficiency in food-service sanitation activities. Naturally, he should have a detailed knowledge of the 1962 “Food Service Sanitation Ordinance and Code” since this entire Procedure is based on that document. He should have a thorough understanding of program administration, and a basic knowledge of the epidemiology of foodborne diseases. His qualifications also should include a demonstrated ability to analyze factual information, to use such information to arrive at logical conclusions, and the ability to translate these conclusions into practical, constructive recommendations.

Since the same criteria will be used in each evaluation, it is necessary that interpretations of that criteria are uniform and consistent. To aid in developing this uniformity, all survey officers should be standardized and certified in the use of standard evaluation methods. The Public Health Service, through its Regional Milk and Food Consultants, will offer a food-service sanitation survey officer standardization and certification program.

In conclusion, the past few minutes have been spent in discussing the need for evaluation and in pointing out many of the areas included in the Public Health Service recommended “Procedure for Evaluating Food Service Sanitation Programs.” The qualifications of the person who is to do such an evaluation also have been emphasized.

Although many months of careful thought and consideration, as well as the best thinking of the States have gone into this document, the Public Health Service has not purported that it has suddenly arrived at a foolproof, absolute solution to the problem of evaluation. It is believed, however, that certain areas have been incorporated into the criteria that are essential to a good food-service sanitation program, and that by use of the questionnaires, specific questions to be answered, and specific guide lines, a more objective evaluation will result.

Evaluation should not be thought of as an end in itself. It is really just the beginning. Through efficient use of evaluation, we can plan and operate better food-service programs.