

PREPARING LOCAL HEALTH DEPARTMENTS TO COPE WITH FOODBORNE DISEASE OUTBREAKS¹

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When a suspected foodborne disease outbreak is reported the local health officer and certain members of his staff must be prepared to swing promptly into action if they expect to determine whether in fact there has been a foodborne disease outbreak and, if so, the causative agent and the food which served as the vehicle. While the services of an epidemiologist and other specially trained personnel can usually be secured from the state health agency, much valuable time can be lost before state level personnel can arrive on the scene.

An investigation should be undertaken immediately if meaningful specimens are to be collected for laboratory analysis and if accurate information is to be secured during interviews. This means the health department should have a plan of operation to be followed when suspected foodborne disease outbreaks are reported and that at least certain basic supplies and equipment to be used in making an investigation be readily available at all times.

Legislation enacted during 1965 requires that the services of a local health department be available in all parts of Michigan. These services may be provided through city, county or district health departments. Each local health department must be under the direction of a medical doctor. Most of these medical directors have had formal training in epidemiology. Many of the sanitarians, public health engineers, public health nurses and other personnel employed by the various health agencies in the State have also had formal training in epidemiology. In addition, practically all professional personnel employed by health departments who have not had an opportunity to avail themselves to formal training in this area received considerable exposure to the techniques of epidemiological investigations through short courses and similar training programs or as a result of field training activities.

Health agencies in Michigan are in a favorable position to make intelligent and meaningful investigations of suspected foodborne disease outbreaks. However, since some departments may go for months without a suspected case of foodborne disease being

reported, there is sometimes a tendency to relax a little and not be prepared to grab the necessary investigation materials and take off on the double when the time comes for action. All too often when a suspected foodborne disease outbreak was reported containers and other materials used for collecting specimens and information were not readily available and frequently it was necessary to improvise.

One day last winter a public health veterinarian employed by one of our local health departments stopped in at our office to show us a kit he had assembled to be used in connection with the investigation of suspected foodborne disease outbreaks. A representative of the Public Health Service just happened to be visiting our Department at the same time. The upshot of the coincidence was that it was decided that every local health department in Michigan should have a kit of this type available. It was also decided that a course on epidemiology and control of foodborne diseases should be held. Funds were found to be available which could be used for purchasing the various materials necessary to make up a kit for each department as well as to cover other necessary expenditures connected with such a course.

The dates of March 1 and 2, 1966, were selected and the job of lining up speakers, securing materials, assembling the kits, reserving meeting rooms and all the other various and sundry activities necessary in organizing such a course were undertaken. An outstanding group of speakers were secured to make the various presentations. Cooperation received from the Communicable Disease Center, Training Branch and the Regional Office of the U. S. Public Health Service, as well as from the various divisions and sections within our own department, was excellent. Without this cooperation, the course could not possibly have been organized and implemented on such short notice.

While planning the course, two basic facts became obvious: (1) The kits which were being prepared should serve as the focal point for the training program; and (2) Since the medical director is the key person whenever human illness is involved, the course should be kept at a level where the presentations would prove both interesting and challenging to these highly educated public health officials.

Invitations to attend the course were extended to

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the directors of each local health department with the suggestion that he have a key member of his staff accompany him. In most cases this proved to be one of the sanitarians.

The kits contained the following items:

1. Three sterilized specimen bottles;
2. A sharp knife (butcher knife) wrapped, labeled and sterilized;
3. Two teaspoons, wrapped, labeled and sterilized;
4. One dessert spoon, wrapped, labeled and sterilized;
5. One pair of forceps, wrapped, labeled and sterilized;
6. One package of paper towels, wrapped and sterilized;
7. Heavy wrapping paper, folded and wrapped in an outer cover and sterilized;
(This paper can be used for covering and transporting large items such as a carcass of a roasted turkey or a ham, or it can be used as a sterile surface on which to prepare specimens)
8. One box of Kleenex;
9. One alcohol lamp and 4 oz. bottle of wood alcohol;
10. Six hand cleaning tissues;
11. One roll of tape 1/2";
12. One marking pencil;
13. Two thermometers (1 regular 0-220° F and 1 maximum registering 0-220° F);
14. Supply of forms to be used for recording information obtained at the time of collecting specimens for laboratory examinations.

To supplement these kits the Bureau of Laboratories of the Michigan Department of Public Health has available "8 packs" of sterile food sample containers which will be furnished to local health departments at no cost. Containers for stool specimens can also be secured from the Michigan Department of Public Health.

Another key to the success of this particular program is that a considerable number of pamphlets, articles, papers, charts, etc., relating to food poisoning were accumulated and presented to the participants

in a looseleaf notebook cover so that this information could be taken back and made a part of the department's reference file. While most of the materials were furnished by CDC, some appropriate pamphlets prepared by the Michigan Department of Public Health, the National Restaurant Association and others were also included. These notebooks proved to be so popular that two dozen extra copies were necessary to fill additional requests.

In an effort to help keep the public informed regarding local health department participation in the training course, arrangements were made for pictures to be taken of each health officer being presented with a kit by the Chief of the Division of Epidemiology, Michigan Department of Public Health. These pictures, together with a short narrative, were forwarded to the local newspapers.

From all indications the program thus far has been highly successful, but the work already completed must only be considered the first step in a continuous effort. Arrangements are already being made to conduct another training program in March of 1967. This program will be expanded to three days. Additional and new information will be presented and it is anticipated that many of those who attended the last course will again want to attend the session next March. There were some health officers as well as other key personnel who could not attend the 1966 session because of previous commitments. It is impractical to extend our thinking much beyond the next training session, but it is entirely possible that we may see fit to continue this program on an annual basis for some time.

We are also thinking in terms of the kits on a continuing basis. It is anticipated that checking the availability and condition of these kits may be made a routine part of each environmental health program evaluation. Since almost invariably one of the sanitarians has been charged with the responsibility of keeping the kit in a ready condition, it seems only logical to consider it as part of the environmental health program.

In our opinion local health officials are in the best position to make prompt and meaningful investigations of foodborne disease outbreaks with the State Health Department serving in a supporting role.