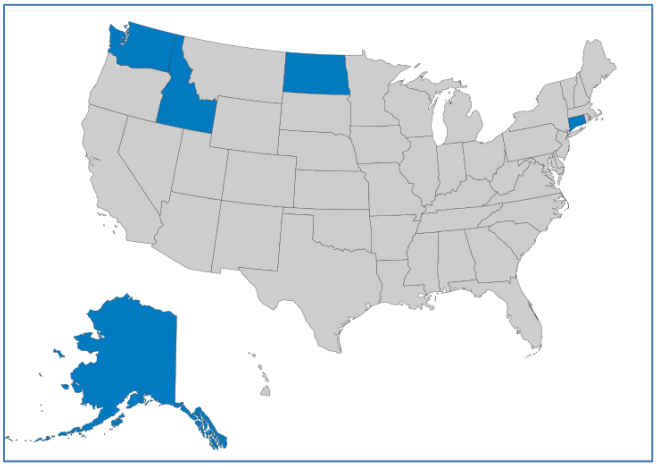
Uses of the CIFOR Toolkit

The CIFOR *Guidelines* Toolkit was chiefly designed for use by individual agencies or jurisdictions to improve foodborne disease outbreak response in that agency or jurisdiction. An interdisciplinary workgroup (with knowledge of the jurisdiction and expertise and practical experience in epidemiology, environmental health, food regulation, laboratory science, and communication) follows a prescribed process, working through the Toolkit worksheets in a predetermined order. The end result is the identification of specific actions to be undertaken in that agency or jurisdiction to improve foodborne disease outbreak response and a plan for implementation of those actions.

Although designed for use by individual agencies and jurisdictions, the Toolkit can be used in other ways to improve foodborne outbreak response. During 2010-11, the Centers for Disease Control and Prevention (CDC) funded 22 states or large cities/counties[1] to bring foodborne outbreak investigation staff together to use the Toolkit and determine which recommendations in the CIFOR *Guidelines* would help those jurisdictions improve outbreak response.



Approaches used by five of the CDC-funded areas (Alaska, Connecticut, Idaho, North Dakota, and Washington State) demonstrate how the Toolkit can be used creatively to improve foodborne outbreak response across jurisdictions.

Alaska

The training took place at a pre-conference workshop before the 2011 Alaska Environmental Health Association Conference. Local public health nurses received special invitations to participate. Forty two people attended the pre-conference workshop including six epidemiologists, 12 environmental health practitioners, and 12 public health nurses.

The training was an introduction to the CIFOR *Guidelines* and Toolkit and was aimed at increasing participant familiarity with the materials. The planning committee completed the initial Toolkit worksheets before the training, and presenters used the Toolkit to help develop their respective presentations. During the workshop, presentations were made by state staff on 10 of the Toolkit Focus Areas. Workshop participants did not receive nor work through any Toolkit worksheets. To cover all of the material, some pieces of the workshop were more didactic than organizers would have liked, leaving less time for group discussion.

Continuing education credits for environmental health practitioners were already available through Conference registration; however, additional time-consuming efforts were made to provide continuing nursing education (CNEs) credits. Organizers thought that awarding CNEs increased attendance by public health nurses and was worth the trade-off.

Training organizers felt that this cross-disciplinary and multijurisdictional gathering was valuable and allowed the identification of communication problems and other issues. Organizers were able to take concrete actions based on the meeting such as the development/improvement of fact sheets and standard data collection forms. They also were able to assemble contact information for key players.

[1]Funded sites included Alaska, Arkansas, Connecticut, Cuyahoga County (Cleveland), Delaware, Florida, Idaho, Illinois, Iowa, Kansas, Kentucky, Knox County (Tennessee), Los Angeles, Maine, Michigan, Milwaukee, Nevada, North Dakota, Pennsylvania, Philadelphia, Washington (state), and West Virginia.

Connecticut

The training consisted of a one-day in-person "Foodborne Disease Outbreak Response Workshop," specifically organized for the purpose of the training. One hundred and thirty-three persons, representing state and local agencies and two tribal nations, were in attendance including 28 directors/assistant directors of health, 15 epidemiologists, 57 environmental health practitioners, and 13 public health nurses. Of the 77 local health departments in Connecticut, 43 (56%) sent representatives to the workshop.

Prior to the training, a subcommittee selected four Focus Areas to be covered during the workshop. Participants were provided an online link to the selected Focus Area worksheets prior to the meeting, although it was unknown how many reviewed the materials beforehand.

During the workshop, a knowledgeable and experienced public health practitioner (former State Epidemiologist) walked attendees through the selected Focus Areas, reviewing each topic area and working through the Toolkit worksheets. Because of his familiarity with state and local jurisdiction performance in outbreak response, the facilitator was able to zero in on known challenging areas. Participants were asked to comment on the CIFOR recommendations associated with the selected Focus Areas and collectively assessed the priority for implementation in Connecticut. The Toolkit worksheets were projected onto a screen for the entire group to view as were relevant comments made by participants.

Outcomes of the workshop were the identification of high priority CIFOR recommendations and the establishment of workgroups to further discuss and evaluate these recommendations for implementation. Although few local jurisdiction representatives chose to participate in these workgroups, the discussions did inform follow-up actions by the state and formed the basis for discussions during the 2013 Outbreak Response Training and rollout of the state's new foodborne disease outbreak investigations guidance manual for local health departments.

Idaho

The training took place during the 2011 Spring Idaho Epidemiology Conference. The second day of the conference was devoted to CIFOR. Forty-six people attended CIFOR Day including 27 epidemiologists and 14 environmental health practitioners, representing all seven public health districts in Idaho.

Before the training took place, a group of upper level state public health staff with experience in all disciplines necessary for foodborne disease investigation and control worked through the Toolkit and identified four Focus Areas in need of improvement across the state. The group also identified specific CIFOR recommendations that they thought would best address those needs.

The training consisted of a series of lectures related to the prioritized Focus Areas and associated recommendations and discussions among participants regarding implementation of the recommendations. Participants received copies of the worksheets for the prioritized Focus Areas to guide the discussion. Dr. Bill Keene, a recognized foodborne disease investigation expert from Oregon, was an invited speaker and shared his insights and best practices regarding foodborne disease investigation and response.

Organizers felt that the cross-disciplinary training stimulated good discussions among state and local public health and environmental health staff. The need for enhanced communication between these parties to improve success in outbreak identification, investigation, and response was solidified.

North Dakota

The training took place at a pre-conference workshop at a previously scheduled environmental health meeting. Fifteen people were in attendance representing local environmental health (five), state public health (two), state environmental health (two), department of agriculture (one), state laboratory (one) and North Dakota State University (three).

Disease control staff pre-selected three Focus Areas that would be covered. During the workshop, participants worked through the individual Focus Area worksheets to prioritize activities to improve outbreak investigation and response. Efforts were made to focus on activities that were important for all jurisdictions to have in place.

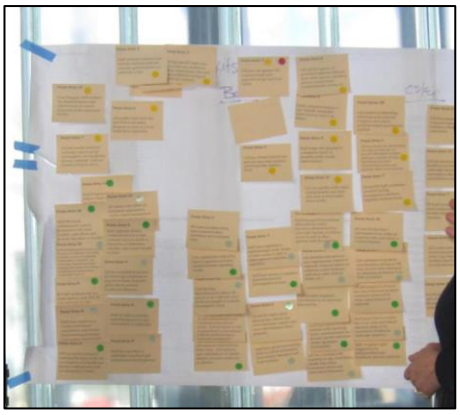
Due to the time required by participants to read through the worksheets, discussion time was limited. As a result, it was not possible to formulate specific action plans. The organizers felt that time could have been used more effectively if meeting participants had received and worked through the Toolkit worksheets before the meeting and if pre-workshop conference calls or webinars had been undertaken to provide background on the individual Focus Areas.

Nonetheless, organizers felt that the meeting facilitated good discussion across agencies and professional groups regarding opportunities to improve foodborne disease outbreak detection and response that would strengthen the North Dakota Foodborne Outbreak Response Protocol that was being drafted at the time.

Washington State

The training consisted of 11 regional meetings (held at sites across the state) involving public health and environmental health staff from surrounding local health jurisdictions. A total of 105 people attended these regional meetings including 8 epidemiologists, 47 environmental health practitioners, and 38 public health nurses. Five participants were from the Indian Health Service.

During these meetings, didactic presentations were limited to topics felt to be relevant to all participants including brief overviews of the CIFOR *Guidelines* and Toolkit and discussions of foodborne illness complaint notifications, notifiable disease reporting, and outbreak reporting.



Using a fictitious foodborne disease outbreak scenario, participating local health jurisdictions (working as jurisdictional teams) documented existing foodborne disease investigation/control procedures and activities in their jurisdiction. With this discussion as a background, local health jurisdictions then considered the keys to success for each of the Focus Areas included in the Toolkit, answering who was responsible for them in their local health jurisdiction and their perceived priority for improvement. (This was done with a set of cards listing each key to success and different colored dots [indicating the priority for improvement] to allow a visual representation of the Focus Areas in greatest need of improvement.)

Based on this exercise, each local health jurisdiction identified the highest priority Focus Area for improvement for their jurisdiction. They then completed the Toolkit worksheet for that Focus Area including the development of realistic and practical action steps.

Organizers felt that the trainings provided an excellent framework for jurisdictions to conduct a meaningful self-evaluation. The training also helped guide follow-up workshops designed to provide local health jurisdictions information on the roles of epidemiology, environmental health, and the laboratory in foodborne outbreak investigations, including multistate outbreak investigations.

Considerations

When using the CIFOR Toolkit for large scale trainings or in settings that involve staff from multiple jurisdictions, organizers should consider the following:

Ability to take advantage of target audience members already assembled for other purposes. Many state health departments and all national public health and environmental health organizations hold regular meetings, bringing together persons with particular professional backgrounds or job titles. Because travel is limited for many local and state agency staff, tacking a CIFOR Toolkit training or pre-conference workshop onto such a gathering can take advantage of planned travel at minimal added expense.

The downside of such add-on meetings, however, is that working through the Toolkit is most meaningful when undertaken by an interdisciplinary workgroup within a jurisdiction because it provides a broader context for assessing current foodborne disease outbreak response in that jurisdiction and needed areas for improvement.

For most effective use of the Toolkit in settings that attract primarily audience members with a particular professional background, it will be critical to invite others (representing other disciplines who might not have had plans to attend the originally scheduled meeting) to enrich the discussions. If this is not possible, organizers should recognize that use of the Toolkit in this manner will be more limited in scope and might best be viewed as the initial step for a more inclusive process that involves others at a later time.

Relevance of discussions across jurisdictional lines. The foodborne disease outbreak investigation practices used in any particular situation depend on a host of factors, including staff expertise, structure of the investigating agency, and agency resources. The value of the CIFOR *Guidelines* and Toolkit reside in the ability of the user to assess local practices and make decisions regarding implementation of recommendations appropriate to the agency or jurisdiction.

In settings where multiple jurisdictions come together to make decisions about their own practices, organizers should consider the following

- Grouping together jurisdictions of similar size, expertise, and resources that are likely to have similar challenges and
- Working on Focus Areas that are highly likely to be relevant to all jurisdictions present.

State staff, familiar with outbreak investigation performance across local jurisdictions, can help identify high priority Focus Areas. In addition, meeting participants could be asked to independently prioritize the Focus Areas before the meeting with the results being summarized and used to guide the focus of the meeting.

One site funded by CDC to undertake CIFOR *Guidelines* and Toolkit trainings, Los Angeles County Department of Public Health, conducted a pre-workshop assessment to prioritize Focus Areas. The assessment was modeled after the Toolkit prioritization worksheet and comprised an online survey launched via SurveyMonkey™. The survey link was e-mailed to prospective workshop participants as well as to those who might not have been able to attend the workshop but were interested in contributing to efforts to improve foodborne outbreak response.

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