Conference for Food Protection
Executive Board Meeting Committee Report

This report must be submitted to your Council Chair for review so that it can be approved and submitted to the Executive Board via the Executive Director 30 days before each Executive Board Meeting (held in April and August of each year). The report must be accompanied by an updated committee roster on the Excel spreadsheet provided (Committee Members Template) located here: http://www.foodprotect.org/work/.

COMMITTEE NAME:  NVEAIS

COUNCIL (I, II, or III):  Council II

DATE OF REPORT:  August 21, 2009

SUBMITTED BY:  Ric Mathis

COMMITTEE CHARGE(S):
Charge 1)  Review the concept of a NVEAIS as proposed in the attached CDC NVEAIS Background Paper

Charge 2)  Prepare a report on the NVEAIS concept for the fall 2009 CFP Executive Board meeting to cover but not limited to:
(a) a brief description of a NVEAIS
(b) a detailed description of the anticipated usefulness of a NVEAIS to food safety programs
(c) the feasibility of reporting environmental assessment data to CDC by food safety programs
(d) the acceptability of a NVEAIS by food safety program managers and the willingness to participate
(e) if appropriate, based on committee deliberations, a recommendation to continue the committee’s work; if not appropriate based on committee deliberations, report the committee’s work complete and recommend the committee be dissolved

Charge 3)  Determine how a NVEAIS could be best supported by the Conference for Food Protection-
(a) explore the appropriateness of an amendment to Standard 5, Foodborne Illness and Food security Preparedness and Response and,
(b) as may be appropriate, develop a recommendation and/or issue for the 2010 CFP Biennial Meeting

REQUESTED ACTION BY BOARD (If Applicable):  Review Report and Provide Feedback/Approval

PROGRESS REPORT / COMMITTEE ACTIVITIES WITH ACTIVITY DATES:

8/31/2009

Revised 3/2009
The committee has met via conference call on July 24 and August 7th, 2009. The following is the results of those calls.

**Charge 1)**  
*Review the concept of a NVEAIS as proposed in the attached CDC NVEAIS Background Paper*  
Completed

**Charge 2)**  
*Prepare a report on the NVEAIS concept for the fall 2009 CFP Executive Board meeting to cover but not limited to:*  

(a) *a brief description of a NVEAIS*  
The National Voluntary Environmental Assessment Information system (NVEAIS) is a detailed environmental assessment database that seeks to identify factors that can be routinely monitored by food safety programs to prevent or reduce the risk for foodborne outbreaks associated with food service establishments.

This system recognizes that although much has been done to focus inspection activities within a hazard surveillance framework, many food control authorities do not have the information necessary from foodborne outbreak investigations to understand the context of reported contributing factors or the food vehicles involved. This process elicits the critical thinking skills necessary to describe exposure events by focusing on the food flow and the performance of an environmental assessment, which integrates contributing factors (what happened) with environmental antecedents (why it happened). The NVEAIS will:

- provide a detailed characterization of food vehicles and monitor food vehicle trends;  
- identify and monitor contributing factors and their environmental antecedents;  
- establish the basis for hypothesis generation regarding factors that may support foodborne outbreak events  
- guide the planning, implementation and evaluation of food safety programs.

Once fully developed, the data gathered into the system seeks to provide local jurisdictions with the ability to monitor the effectiveness of control and intervention measures and allow the state level the ability to demonstrate the need for food safety programs and resources and the allocation of those resources.

(b) *a detailed description of the anticipated usefulness of a NVEAIS to food safety programs*  
See Attachment 1

(c) *the feasibility of reporting environmental assessment data to CDC by food safety programs*  
See Attachment 1

(d) *the acceptability of a NVEAIS by food safety program managers and the willingness to participate*  
See Attachment 1

Based on the responses of seven of the nine State EHS-Net Food Coordinators, the NVEAIS committee has concluded that:

1. NVEAIS is useful to food safety programs.  
2. NVEAIS is a feasible mechanism for reporting environmental assessment data to CDC  
3. NVEAIS is an acceptable tool for investigating foodborne disease outbreaks on the state level and has the potential to be a valuable resource in foodborne outbreak investigation training for local health departments.
(e) if appropriate, based on committee deliberations, a recommendation to continue the committee’s work; if not appropriate based on committee deliberations, report the committee’s work complete and recommend the committee be dissolved

After deliberation, the committee determines that the work is complete and recommends the committee be dissolved.

**Charge 3**
determine how a NVEAIS could be best supported by the Conference for Food Protection-
(a) explore the appropriateness of an amendment to Standard 5, Foodborne Illness and Food security Preparedness and Response and,
(b) as may be appropriate, develop a recommendation and/or issue for the 2010 CFP Biennial Meeting

See Attachment 2
ATTACHMENT 1
Charges 2b-d

As a result of the April 2009 National Voluntary Environmental Assessment Information System (NVEAIS) Conference for Food Protection (CFP) meeting in Atlanta, GA a subcommittee was formed to survey the EHS-Net Food Coordinators regarding their thoughts on the EHS-Net Outbreak Study tool. EHS-Net is a collaborative forum of environmental health specialists whose mission is to improve environmental health. These specialists collaborate with epidemiologists and laboratorians to identify and prevent environmental factors contributing to foodborne and waterborne illness and disease outbreaks. EHS-Net assists state health departments in their efforts to improve the practice of environmental health service programs. This is accomplished by identifying environmental antecedents (underlying factors) to illness and disease outbreaks, translating findings into improved prevention efforts using a systems-based approach, offering training opportunities to current and future environmental health specialists and by strengthening the relations among epidemiology, laboratory, and environmental health programs.

The NVEAIS is being proposed as a voluntary program to augment the EHS-Net Outbreak Study which is part of the current Foodborne Disease Outbreak Surveillance System maintained by the Centers for Disease Control and Prevention (CDC) to strengthen the role of food safety authorities in foodborne disease outbreak surveillance and in turn, CDC’s ability to support their foodborne disease prevention and control efforts. The purpose of a NVEAIS would be to identify factors that can be routinely monitored by food safety programs to prevent or reduce the risk of foodborne outbreaks associated with foodservice establishments through the systematic collection, analysis, interpretation and dissemination of environmental data from foodborne disease outbreak investigations.

The purpose of the subcommittee was to determine the opinion of the EHS-Net Food Coordinators regarding their view of the Outbreak Study, is it useful, feasible and acceptable. This very select group was chosen as our study experience for several reasons. EHS-Net Food Coordinators across nine States have been coordinating the collection of environmental data for foodborne outbreaks within their State for several years. They have multiple years of experience with collecting environmental data both prior to and during the existence of the Outbreak Study, and therefore would have the best opinion on whether or not the Outbreak Study is useful, feasible and acceptable. Other States were not solicited with this survey since they do not have experience using the Outbreak Study.

Seven of the nine EHS-Net Food Coordinators responded to our survey giving us a 78% response rate. Below each survey question is a summary of the responses received by the EHS-Net Food Coordinators.

Results:

1. Who conducts the EHS-Net Outbreak Study in your State?

<table>
<thead>
<tr>
<th>Conductor</th>
<th>Responded (%)</th>
</tr>
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<tbody>
<tr>
<td>EHS-Net Food Coordinator</td>
<td>6/7 = 86%</td>
</tr>
<tr>
<td>State Health Department Staff</td>
<td>4/7 = 57%</td>
</tr>
<tr>
<td>Local Health Department Staff</td>
<td>3/7 = 43%</td>
</tr>
</tbody>
</table>

2. Is the EHS-Net Outbreak Study accepted as an addition to foodborne outbreak investigations by your Food Safety Program Manager(s)?

<table>
<thead>
<tr>
<th>Response</th>
<th>Responded (%)</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>4/7 = 57%</td>
</tr>
<tr>
<td>No</td>
<td>1/7 = 14%</td>
</tr>
<tr>
<td>I Don’t Know</td>
<td>2/7 = 29%</td>
</tr>
</tbody>
</table>

For the States which replied ‘No’ and ‘I don’t know’ one has very limited experience with the Outbreak Study and did not feel they could sufficiently answer the question. The other States felt the Outbreak Study adds an extra burden of work for the Local Health Department and in one State; the State Food Program has no involvement with foodborne outbreak investigations. However, these concerns were not expressed by the majority of the States who
responded. The majority found this study as an accepted addition to their Food Safety Program. Therefore, the NVEAIS committee would recommend this as acceptable to Food Safety Program Managers.

3. Is the EHS-Net Outbreak Study a useful or worthwhile undertaking?

<table>
<thead>
<tr>
<th>Yes</th>
<th>6/7 = 86%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1/7 = 14%</td>
</tr>
</tbody>
</table>

One State replied No and stated the EHS-Net data collected does not show anything. In their opinion, the data collected doesn’t seem to add any more valuable information on top of what is collected by eFORS/NORS. The outbreak study tool would be more useful if tailored to specific suspected outbreak etiologies and it appears torn between functioning as a research data collection instrument and as a tool to be used during outbreak investigations, without doing either one very well. However, these concerns were not expressed by any of the other States which responded. 86% felt the Outbreak Study is a very useful and worthwhile undertaking. A review of the Outbreak Study and the NORS form by the NVEAIS committee identified many significant differences between the data collected for the Outbreak Study and the NORS form. Given these results, the NVEAIS committee would recommend this is a useful tool for food safety programs to identify and report other environmental antecedents to foodborne outbreaks which are not reported to CDC via NORS or other reporting systems. The majority of the States stated the Outbreak Study is worth the time it takes to conduct because the data collected illustrates the factors leading up to a foodborne disease outbreak.

4. Has your State experienced any significant roadblocks in conducting the EHS-Net Outbreak Study?

<table>
<thead>
<tr>
<th>Yes</th>
<th>2/7 = 29%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>5/7 = 71%</td>
</tr>
</tbody>
</table>

The two States which reported experiencing roadblocks both described miscommunication issues and needs for improving communication amongst Epidemiology and Environmental Health staff and between Local and State offices. These issues are seen throughout the Nation whether or not the Outbreak Study is used and are routine issues which are part of the nature of investigating outbreaks. The majority of the States interviewed (71%) did not experience any roadblocks; therefore the NVEAIS committee would recommend this as being both a feasible and useful tool.

5. Has your State experienced any significant roadblocks entering data or working with the EHS-Net Information System in reporting data to CDC?

<table>
<thead>
<tr>
<th>Yes</th>
<th>0/7 = 0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>7/7 = 100%</td>
</tr>
</tbody>
</table>

No States reported any significant roadblocks in entering the data or working with the EHS-Net Information System in reporting data to CDC. Therefore, the NVEAIS committee would recommend that it is feasible for food safety programs to report environmental assessment data to CDC.

6. If EHS-Net Outbreak Studies are conducted by Local Health Department staff, is the local health department compensated for conducting the studies?

<table>
<thead>
<tr>
<th>Some sort of Compensation</th>
<th>3/3 = 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary Compensation</td>
<td>2/3 = 67%</td>
</tr>
<tr>
<td>Provided with field supplies</td>
<td>2/3 = 67%</td>
</tr>
</tbody>
</table>

The three States which use Local Health Department staff to conduct EHS-Net outbreak studies provide the Local Health Departments with some sort of compensation. Further discussion with these three States emphasized that the compensation is minimal. Based on their responses, and overall that NVEAIS will be a voluntary system, the NVEAIS committee recommends this a being feasible.
7. If Local Health Departments are compensated for conducting EHS-Net Outbreak Studies in your State, do you think conducting the studies would be possible without compensation?

Yes 2/3 = 67%
No 1/3 = 33%

For the three States which do provide the Local Health Department’s with some sort of compensation to conduct the EHS-Net Outbreak Study, two of them feel that the LHD can conduct it without any additional compensation and one State felt this was not possible. Since the majority of the States who provide compensation feel this study can be conducted by LHD offices without any additional compensation, the NVEAIS committee recommends that it is feasible for food safety programs to collect and report environmental assessment data to CDC without receiving any additional compensation.

8. Were there any hurdles you had to overcome initially before using the new form for Foodborne Outbreak Investigations?

No 6/7 = 86%
Required additional Environmental Health and Epidemiology Training 1/7 = 14%

Only one State reported a hurdle to overcome before using the Outbreak Study tool; however this hurdle was a benefit to their program. According this EHS-Net Food Safety Coordinator, the Outbreak Study allowed them to cross train both Epidemiology and Environmental Health staff to better investigate foodborne disease outbreaks. The majority of other States stated the Outbreak Study did not provide them with any hurdles to overcome, therefore the NVEAIS committee recommends this study is acceptable, feasible and useful for food safety programs to use as part of their routine foodborne disease outbreak investigations.

9. Do you think other States would be able to conduct the EHS-Net Outbreak Study without receiving any additional compensation?

Yes 4/7 = 57%
No 1/7 = 14%
Don’t Know 2/7 = 29%

The majority (57%) of respondents believe the EHS-Net Outbreak Study can be completed by other states without additional compensation. The majority of these respondents stated that the information collected for the EHS-Net Outbreak Study is virtually the same as what would be collected as part of the outbreak investigation itself, and so the only additional work is that of filling out the Study form which in and of itself, should not require additional compensation. One ‘yes’ respondent also stated that the Outbreak Study improved outbreak investigation techniques, and is therefore providing a service to the states, rather than acting as a burden. The one respondent who answered ‘No’ stated that because many states are already lacking sufficient state and local health department staff, it would be difficult to expect what personnel resources they currently have to take on the task of conducting the EHS-Net Outbreak Study. Of the two respondents who answered ‘Don’t Know,’ one stated that without additional compensation, there wasn’t much incentive to conduct the Study. The other ‘Don’t Know,’ respondent stated that their state was fairly well-funded, so for them funding wasn’t a big issue, but they were concerned that in a state lacking sufficient funding, the Outbreak Study might be too much of a burden to complete. Based on these responses, the NVEAIS committee recommends this study is acceptable, feasible and useful for food safety managers to incorporate into their programs without receiving any additional compensation.

10. Do you think other States would require additional training for personnel conducting the EHS-Net Outbreak Study?
Respondents overwhelmingly answered that they believe additional training is needed for personnel conducting the EHS-Net Outbreak Study. Specific areas of training that were suggested include:

- Basics of foodborne disease outbreak investigation
- Communication and cooperative work skills
- Intent of, purpose of, interpretation of, and date entry for the Outbreak Study itself
- Illustrations of the benefit of using the Outbreak Study instrument in an outbreak investigation, and for the long-term data findings
- Identification of contributing factors

Since this training will be made available by CDC to all State and Local Health Department Officials free of charge if they participate in NVEAIS, the NVEAIS committee recommends this study is acceptable, feasible and useful for food safety managers to incorporate into their programs.

11. Do you think additional personnel, other than the inspector of the facility, will be required to complete the EHS-Net Outbreak Study?

<table>
<thead>
<tr>
<th></th>
<th>Yes 7/7 = 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0/7</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>0/7</td>
</tr>
</tbody>
</table>

This question was answered approximately 50/50, with a majority (57%) answering Yes, and 43% answering No. One of the respondents, who answered ‘No,’ stated that the data collection in the field could be completed without additional personnel, but that the data entry and analysis would require the help of additional personnel. Of those that answered ‘Yes,’ the tasks suggested for additional personnel to perform include limiting the personnel to Environmental Health personnel only to minimize inconsistency, as well as having additional personnel whose sole responsibility is data entry and analysis, leaving the data collection to a separate person/group of people. Additionally, one respondent who indicated additional personnel would be required stated that epidemiologists working together with environmental health specialists were the best way to conduct the EHS-Net Outbreak Study, as different components of the Study would be best filled out by the specialists in their respective fields. The NVEAIS committee sees the team approach between Epidemiology, Environmental Health and the Laboratory as the best approach to conduct foodborne disease outbreak investigations. Based on the responses, the NVEAIS committee recommends this study to be acceptable, feasible and useful.

12. Is it feasible for the inspector of the facility who conducts the EHS-Net Outbreak Study to also perform data entry for the Study?

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>No</td>
<td>3/7 = 43%</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>0</td>
</tr>
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</table>

The majority (72%) of respondents answered that it was feasible in their state for the inspector who conducts the EHS-Net Outbreak Study to also perform data entry for the Study. One person who answered ‘Yes,’ also added that while it is feasible, they did not believe the inspector was the best person to data enter as they believe the instrument collects information beyond the data collected in the establishment by the inspector. One respondent answered ‘No,’ to this question, stating that they believed the workload associated with inspecting an establishment after an outbreak, as well as collecting and reporting the data for the Outbreak Study is too much of a burden. One respondent answered ‘Don’t Know,’ to this question, stating that their experience showed that the best person to conduct the EHS-Net Outbreak Study is someone who is part of EHS-Net, not necessarily the inspector of the facility. Since the goal of NVEAIS committee is to expand the use of the Outbreak Study outside of EHS-Net and provide free training to the staff who will be using this tool, the NVEAIS committee recommends this study to be feasible for Local Health Departments to conduct and report the data to CDC in the best method which would be even more feasible for them.
Based on the responses of seven of the nine State EHS-Net Food Coordinators, the NVEAIS committee has concluded that:

1. NVEAIS is useful to food safety programs.
2. NVEAIS is a feasible mechanism for reporting environmental assessment data to CDC
3. NVEAIS is an acceptable tool for investigating foodborne disease outbreaks on the state level and has the potential to be a valuable resource in foodborne outbreak investigation training for local health departments.
ATTACHMENT 2

Charge 3)

determine how a NVEAIS could be best supported by the Conference for Food Protection

(a) explore the appropriateness of an amendment to Standard 5, Foodborne Illness and Food security Preparedness and Response

Findings:
Standard 5 of the FDA Voluntary Regulatory Retail Food Program Standards is designed to establish best practices related to FBI response and establishes criteria for the surveillance, investigation, response and review of food related incidents. The CDC NVEAIS tool has a somewhat different focus to collect data that can be used to prevent or reduce the risk of foodborne outbreaks associated with food service and is designed more as a research tool to identify and monitor contributing factors and their environmental antecedents. Both are important aspects for any regulatory program however we have determined that it would not be appropriate to attempt to incorporate use/participation in NVEAIS as a requirement of Program Standard # 5 for the following reasons:

- Difference in focus
- Lack of annual reports as required currently in Standard 5
- Scope of current enrollment in Program Standards of hundreds of enrolled jurisdictions would not be something CDC would desire if made part of the criteria.

Instead of incorporating into the Program Standards criteria, we are proposing that the following statement be included in the Standard 5 OUTCOME Section below:

Outcome
A food regulatory program has a systematic approach for the detection, investigation, response, documentation, and analysis of alleged food-related incidents that involve illness, injury, unintentional, or deliberate food contamination.

(b) as may be appropriate, develop a recommendation and/or issue for the 2010 CFP Biennial Meeting

Add:
“Regulatory programs are encouraged to also participate in the CDC National Voluntary Environmental Assessment Information System (NVEAIS). NVEAIS is designed to provide a more holistic view of foodborne disease outbreaks and provide a data source to measure the impact of food safety programs to further research and understand foodborne illness causes and prevention (website).”