Interstate Shellfish Sanitation Conference



Final Report

Cooperative Agreement # MX-97417201-0 "EDUCATING THE AT-RISK CONSUMER"

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I. Final Report

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II. Abstract

Vibrio vulnificus (Vv) infection, morbidity and mortality continue to be a concern to the Interstate Shellfish Sanitation Conference (ISSC). Each year, an estimated 100 cases of Vibrio vulnificus infection are reported to the Centers for Disease Control and Prevention. This number includes infection resulting from injury and from consumption of raw oysters.

The Interstate Shellfish Sanitation Conference (ISSC) is a national non-profit organization that includes participation from States, Federal Public Health Officials (FDA, NOAA, and EPA), Shellfish Industry, Native American Tribes, Academia, AFDO, consumer representatives, and other parties interested in safe consumption of raw molluscan shellfish.

The purpose of the ISSC is to provide formal structure for State regulatory authorities to participate in establishing regulatory guidelines and procedures for uniform State application of the National Shellfish Sanitation Program (NSSP). They include the necessary control measures to ensure a safe shellfish supply to the consuming public.

III. Executive Summary

In 2001, the ISSC expanded the scope of the National Shellfish Sanitation Program (NSSP) to include measures to reduce the number of illnesses associated with *V. vulnificus* through the adoption of an ISSC *Vibrio vulnificus* Risk Management Plan (ISSC Proposal 00-201). Education of the at-risk consumer is an important element of the Plan.

The ISSC Vv Risk Management Plan includes three (3) primary components and several illness reduction goals which are to be accomplished within seven years.

- (1) The ISSC plan includes education efforts to educate the at-risk;
- (2) Promotion of processing technology to reduce the levels of Vv in oysters; and
- (3) Development of regulatory controls and implementation strategies should education and promotion of processing technology fail to achieve the established goals of the plan.

The ISSC Vibrio Management Committee and Vv Subcommittee have been carefully reviewing state progress in meeting the goals of the Plan. Information obtained from consumer surveys, post harvest processing surveys, illness data, and feedback from state

regulatory agencies, the shellfish industry and other technical advisers have provided the ISSC with tools for assessing the effectiveness of collective illness reduction efforts. This information also provides insight into additional activities having the potential to promote further illness reduction.

IV. Purpose

This ISSC *Vv* Illness Reduction Plan includes a disease reduction goal for decreasing the rate of etiologically confirmed shellfish-borne *V. vulnificus* septicemia illnesses from the consumption of commercially harvested raw or undercooked oysters by 40% in five years and by 60% within seven years. Several options exist for implementation of the control plan. The Plan includes identification of the administrative procedures and resources necessary to accomplish the stated goals. Each state's involvement in this collective illness reduction program would focus on these cumulative illness reduction goals. Should the States collectively not achieve the 40% five-year illness reduction goal, or adequately achieve performance measures, the ISSC will evaluate the need for incorporation of additional harvest controls to assure achievement of the 60% illness reduction goal by the end of the seventh year.

The ISSC Vv Risk Management Plan includes three (3) primary components and several milestones which are to be accomplished within seven years.

- (1) The ISSC plan includes education efforts to educate the at-risk;
- (2) Promotion of processing technology to reduce the levels of Vv in oysters; and
- (3) Development of regulatory controls and implementation strategies should education and promotion of processing technology fail to achieve the established goals of the plan.

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V. Approach

In 2001 the ISSC proposed the following activities to address education of at-risk consumers.

1. Provide partial funding for a facilitator to assist states in developing and implementing *Vibrio vulnificus* illness reduction as outlined by the Conference.

These state programs will utilize a comprehensive network of regulatory, advocacy groups, industry and public health professionals to accomplish education of high-risk consumers and other illness reduction strategies. Materials developed with funding from other sources will be provided to states in the implementation of their state plans.

- 2. Provide funding for distribution of educational materials in workshops and outreach projects. The ISSC will initially work with the states of Florida and Mississippi to conduct educational workshops for licensed physicians. Additional efforts to educate clinicians will be held in Alabama, Mississippi, Louisiana and Texas. The workshops will address diagnosis, treatment, and other educational information related to *V. vulnificus*. The location of the workshops will be determined by identifying areas reporting higher numbers of *V. vulnificus* illnesses.
- 3. Provide funding for conduction of outreach projects and other proposal which offer innovative opportunities to reach the at-risk population. This project is proposing to underwrite the cost of conducting outreach projects and other workshops as deemed necessary by individual Gulf States.
- 4. Assist in funding state pre and post-assessment of Vv educational program. This proposal will provide partial funding for evaluation of various state and advocacy group education efforts.

VI. Findings

In 2001 and 2002 the ISSC accomplished the following tasks:

- Developed educational materials for presentation to the Florida Medical Association. These materials have been made available for use in other states as they conduct their outreach projects.
- Provided a state facilitator to meet with states and assist in the organization of their outreach programs.
- The ISSC State Facilitator began working on state voluntary *Vibrio vulnificus* disease reduction strategies. Letters were sent to each state by the ISSC Executive Director requesting cooperation in anticipation of ISSC Proposal 00-201. Meetings were held with Florida, Alabama, Mississippi, and Louisiana with an addition meeting in Louisiana focused on the development of an education program scope of work.
- Met with Texas Department of Health to address the state epidemiological reporting requirements, a Consumer Education Program, a plan for reaching the post harvest treatment 2004 and 2006 goals and/or equivalent goals as spelled out in Proposal 01-201 as adopted by the 2001 ISSC Conference.
- Began development of contracts with States to provide funding for each State *Vv* Education Program.
- Provided materials for Florida Medical Association Meeting. Materials were distributed to participants.
- Participated in a panel discussion on *V. vulnificus* and its effect on the at-risk consumer at the Florida Medical Association Meeting.

- Provided *Vibrio vulnificus* Educational Display for exhibition at the Florida Medical Association Meeting.
- Reviewed participants' feedback from Florida Medical Association Meeting to determine the effectiveness of materials provided.
- Met with state education coordinators as a group to discuss educational activities to accomplish illness reduction strategies for their respective state.
- Worked with each state to develop the educational component of their illness reduction strategy management plan. These plans incorporate physician and health care provider workshops.
- Requested Gulf States identify opportunities to conduct workshop for physicians and other health care personnel.
- Florida agreed to work with the ISSC to conduct a *V. vulnificus* workshop for food handlers and inspectors at the retail level and to seek a speaker's slot and space for the ISSC display of *Vv* education materials at the annual meetings of the Florida Nursing Association and Florida Dietetic Association.
- Began gathering information on the use of web-based training for health care professionals seeking continuing education credits.
- Received guidance from the VMC and *Vibrio vulnificus* Subcommittee which is continuing to develop implementation strategies for the ISSC *V. vulnificus* illness reduction program. The VMC has adopted interim criteria for evaluation of state education programs. The criteria include physician and other health care provider workshops.

In October 2003, ISSC requested a Grant amendment to develop an online education module for physicians on *Vibrio vulnificus* that satisfies state requirements for continuing medical education (CME) units. This course is intended to enhance physicians' ability to prevent, diagnose and treat patients exposed to *Vibrio vulnificus* and to improve overall competency in this area. The primary reason for requesting the amendment was our recognition that our workshop approach would not provide the opportunity to reach a significant number of physicians. We concluded that to affect the illness reduction goals of the Risk Management Plan, our physician education efforts must reach a broader audience. The online course provided an opportunity to significantly expand our audience.

The ISSC developed the course curriculum, including setting objectives and determining educational content. The ISSC also provided oversight to the educational software development firm with expertise in this area. This firm will maintain records of those that have successfully completed the training and send written confirmation of completion.

The ISSC will provide funds for states to promote the online program to physicians through associations, meetings, journals etc.

In November 2004, the Interstate Shellfish Sanitation Conference (ISSC) launched "Vibrio vulnificus Diagnosis, Prevention and Treatment" program. Tulane University approved the course as satisfying national requirements for continuing medical education (CME) units for licensed physicians. For 18 months, Tulane University has agreed to provide 1.0 CME units to medical doctors who complete the course with a passing score on the final exam.

This course prepares physicians to identify the clinical manifestations of *Vibrio vulnificus* infection, know current treatment guidelines, recognize groups at higher risk of infection and advise patients to avoid exposure to raw oysters. Modules on diagnosis, treatment and prevention address each of these areas in detail. Audio and visual input, combined with photographs, illustrations, graphics, and self-tests make the course interesting, engaging and effective.

In October 2004, the ISSC sent a letter to 15,141 licensed physicians in Texas, Florida and Louisiana informing them of the course. This letter has increased the course enrollment to date. Further promotion through state and regional physician associations, medical journals and websites is planned over the next few months. Promotion will intensify as warmer weather and the high-risk season approaches. The program has an evaluation feature that allows the ISSC to evaluate different types of promotional efforts.

Program developer, Flying Fish, is responsible for tracking course participants, including rates of completion, exam scores, evaluations and demographics. To date, 86 physicians have accessed the course and 73 have successfully completed it. These physicians include 42 from Florida, 26 from Texas and 10 from Louisiana. Physicians from other states have taken the course as well—Mississippi (3), Georgia (1), New York (1) and Missouri (1). The course took participants an average of 15 minutes to complete.

VII. Evaluation

The ISSC contracted with ORC Macro to determine changes in the level of consumer knowledge of *Vibrio vulnificus*. The study is a follow-up to the baseline study completed in 2002 and will serve as an assessment of the effectiveness of collective *Vv* education efforts. ORC Macro began conducting interviews in September 2004 and concluded in December 2004. Five-hundred (500) interviews were conducted in each of four (4) states (Florida, Louisiana, Texas, and California). A total of one-hundred-fifteen (115) interviews were conducted in Spanish across all states. The data gathered will be quality checked and organized, then statistically analyzed. The final report will be completed in mid-March 2005.

VIII.	Prepared By: Kan B. More	February 25, 2005
	Signature of Principal Investigator	Date
IX.	Approved By:	February 25, 2005
	Signature of Authorized Representative	Date