

Food Safety Education

Food Safety Education

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food Safety Education

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|--------------|--|-----------------|-----------------|----------------|----------------|
| 501 | New and Improved Food Processing Technologies | 10% | | 60% | |
| 503 | Quality Maintenance in Storing and Marketing Food Products | 45% | | 30% | |
| 504 | Home and Commercial Food Service | 45% | | 10% | |
| Total | | 100% | | 100% | |

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

| Year: 2007 | Extension | | Research | |
|---------------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| Plan | 9.2 | 0.0 | 5.6 | 0.0 |
| Actual | 9.0 | 0.0 | 11.7 | 0.0 |

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

| Extension | | Research | |
|-------------------------------|----------------|-----------------|----------------|
| Smith-Lever 3b & 3c 191829 | 1890 Extension | Hatch 179985 | Evans-Allen |
| | 0 | | 0 |
| 1862 Matching 313989 | 1890 Matching | 1862 Matching | 1890 Matching |
| | 0 | 847478 | 0 |
| 1862 All Other 172311 | 1890 All Other | 1862 All Other | 1890 All Other |
| | 0 | 664428 | 0 |

V(D). Planned Program (Activity)

1. Brief description of the Activity

In 2007, the Food Safety team conducted 84 face-to-face and on-line courses that assured that service industries and others safely handled food, making use of the most recent research about food-borne illnesses.

Widespread availability at these targeted groups provide a great service to regulatory services that seek to minimize foodborne illness in Minnesota. The well-tested Food Safety program was used for a variety of important audiences in 2007, including:

- Volunteer and community settings such as churches, community hall and food stands.
- Spanish-speaking food service workers who learn through trained bilingual trainers,
- Food managers
- Food service workers needing certification or renewal

The team responds to emerging needs for education that supports food regulation. In 2004, the Minnesota Legislature passed what is referred to as the "Pickle Bill". This legislation requires that home processed foods intended for sale at farmer's markets or community events consist of either an acid food or an acidified food. This applies to pickles, vegetables or fruits. Workshops conducted in five locations taught 138 home food preservation entrepreneurs the requirements of the bill and all food safety content needed to comply with the requirements.

MAES research supported food safety in 2007 through several areas of work. Impacts reported this year include development of a tool for food companies to benchmark their food security, as well as continuing work on food shelf-life stability and measurement.

2. Brief description of the target audience

UMN research supports the food development industry and food processing industry while direct audiences of outreach efforts are volunteer and professional food service workers. Professional workers are engaged through relationships with the National Restaurant Association and collaboration with food safety regulation. Volunteer workers are reached through community-based connections that help us to reach entrepreneurs, fishermen, farmers and family. This year, the team targeted all businesses that were required to be compliant of new food safety regulation.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|-------------|-----------------------------------|-------------------------------------|----------------------------------|------------------------------------|
| Year | Target | Target | Target | Target |
| Plan | 1595 | 7400 | 0 | 0 |
| 2007 | 1630 | 50116 | 0 | 0 |

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

| Year | Target |
|--------------|---------------|
| Plan: | 0 |
| 2007: | 0 |

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

| | Extension | Research | Total |
|-------------|------------------|-----------------|--------------|
| Plan | | | |
| 2007 | 0 | 48 | 48 |

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

On-line and face-to-face classes will be delivered for food service workers in English. (Target expressed as number of courses offered.)

| Year | Target | Actual |
|-------------|---------------|---------------|
| 2007 | 58 | 84 |

Output #2

Output Measure

Content for food service professionals will be translated into Spanish and adapted for Latino culture participants. (Target indicates number of courses available in Spanish.)

| Year | Target | Actual |
|-------------|---------------|---------------|
| 2007 | 3 | 2 |

Output #3

Output Measure

Media distribution of food safety content areas will be disseminated on timely topics. (Target indicates number of new content releases distributed.)

| Year | Target | Actual |
|-------------|---------------|---------------|
| 2007 | 52 | 14 |

V(G). State Defined Outcomes

| O No. | Outcome Name |
|-------|--|
| 1 | At the completion of each teaching session, participants will show increased knowledge of food safety as measured on the Life Skills evaluation. (Target expressed as a percentage of participants.) |
| 2 | At the completion of each teaching session, participants will identify behaviors they intend to change and follow up evaluations will determine whether these behaviors change. (Target expressed as number of behaviors changed / participant.) |
| 3 | The MN Dept. of Health reports an 18-20% decrease in inspection critical violations in establishments that employ a Certified Food Manager. Food Safety Education programs will certify food managers. (Target expressed as % of pass rates.) |
| 4 | Research will inform food companies decision-making related to food protection. |

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
|------|---------------------|--------|

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

| KA Code | Knowledge Area |
|---------|----------------|
|---------|----------------|

V(H). Planned Program (External Factors)

External factors which affected outcomes

Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

The growing number of non-English speaking employees in the food industry requires new approaches to service delivery.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

Other (Economic Value Study)

Evaluation Results

Minnesota Department of Health staff report that there has been an 18 - 20% decrease in critical violations during health inspections of food service establishments since the Certified Food Manager requirement was adopted.

While food safety education is believed to be essential to the prevention of foodborne illness in the U.S, it is difficult to estimate how many cases of illness education prevents.Economic value is also difficult to estimate. The North Carolina State University Food Safety Education Specialist, Dr. Angela Fraser, has written a rationale and calculation for the economic value for food safety education programs for employees of food service establishments.The document references the National Restaurant Association which has estimated the average cost of a foodborne illness outbreak to an establishment at about \$75,000.Food safety training is one way food service operators can proactively prevent such losses.In January through December, 2007, approximately 500 establishments were represented by our participants in ServSafe classes and on-line certification courses.Using the calculation of \$75,000 multiplied by 500 establishments, the prevention value has an estimated economic value of over \$37.5 million.

Key Items of Evaluation

The estimated average cost of a foodborne illness outbreak for a business is \$75,000. In January through December, 2007, approximately 500 establishments were represented by our participants in ServSafe classes and on-line certification courses. Using the calculation of \$75,000 multiplied by 500 establishments, the prevention value has an estimated economic value of over \$37.5 million.