

**V(A). Planned Program (Summary)**

**Program # 6**

**1. Name of the Planned Program**

Food Safety

Reporting on this Program

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	50%		0%	
723	Hazards to Human Health and Safety	50%		0%	
	<b>Total</b>	100%		0%	

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	0.0	0.0	0.0
Actual Paid Professional	11.1	0.0	0.0	0.0
Actual Volunteer	20.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
70733	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
70733	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
709237	0	0	0

**V(D). Planned Program (Activity)**

1. Brief description of the Activity

Food Handler Certification:

- 1) Pretest
- 2) Post Test
- 3) National Examination
- 4) DC Code Examination
- 5) Ability of agencies to pass DC inspections
- 6) Measure of knowledge acquired from food handler certification messages include in the national examination
- 7) Data Collection
- 8) Data Analysis
- 9) Reporting

**2. Brief description of the target audience**

- Non-commercial agency staff members
- Ongoing participating food handlers
- Non-profits

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	119779	0	20749	0

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

**Patent Applications Submitted**

Year: 2012  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2012	Extension	Research	Total

<b>Actual</b>	0	0	0
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**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Classroom instruction/workshops on Food Handler Certification Regulations to include DC Code Examination or Serve Safe National Examination, and Practice Examinations

<b>Year</b>	<b>Actual</b>
2012	0

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Percentage decrease in the risk of factors of foodborne illness.
2	Number of participants gaining awareness, knowledge and skills in Food Handling techniques.
3	Number of participants scoring a required minimum of 70% on post test and national examination.

## **Outcome #1**

### **1. Outcome Measures**

Percentage decrease in the risk of factors of foodborne illness.

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

Change in Knowledge Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	395

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Foodborne illness is responsible for approximately 76 million and 5,000 deaths per year in the United States. Approximately 325,000 Americans will require hospitalization yearly because of something they ate. While it is difficult to determine the total costs of foodborne illness due to many conditions such as reduced productivity, lost wages, human suffering, and medical costs that go unreported, most experts agree that the annual costs in the United States is between 10 and 83 billion dollars. The individuals most at risk of contracting a foodborne illness include the elderly, young children and pregnant women.

#### **What has been done**

A total of 79 different individuals participated in the food handler certification training classes conducted in five different sessions for a total of 20 clock hours for each session. Prior to the start of the session a pretest was administered and immediately following the session a posttest was administered. Additionally, the DC Code Examination and the National Certification exam were administered. The pretest posttest and DC Code Exam are scored by the Program Assistant using a scored key sheet and the National Certification Examination is scored by the National Program Office. All total 79 or 100% of the participants completed the training.

#### **Results**

The Food Handler Certification Program results revealed a 100 pass rate on the national examination. The mean score of 68.6% on the pretest; mean score of 91% on the posttest; mean score of 83% on the DC Code exam; and a mean score of 89% on the national exam; 100% of the participants scored the minimum of 70% on the posttest and the national exam.; 100% of the participants are now employed in the food service industry. Many of the participants were reentering residents of the District of Columbia. The number of participants is reduced during this reporting period due to budget cuts.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

#### Outcome #2

##### 1. Outcome Measures

Number of participants gaining awareness, knowledge and skills in Food Handling techniques.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Knowledge Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2012	160965

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

Foodborne illness is responsible for approximately 76 million and 5,000 deaths per year in the United States. Approximately 325,000 Americans will require hospitalization yearly because of something they ate. While it is difficult to determine the total costs of foodborne illness due to many conditions such as reduced productivity, lost wages, human suffering, and medical costs that go unreported, most experts agree that the annual costs in the United States is between 10 and 83 billion dollars. The individuals most at risk of contracting a foodborne illness include the elderly, young children and pregnant women. Of the 66 individuals trained in the food handler certification program, 100% of the participants gained awareness, knowledge, and skills in food handling techniques. None or 0% of the participants' facilities reported receiving food handling violations or any illnesses associated with foodborne conditions. The number of participants is reduced during this reporting period due to budget cuts.

###### **What has been done**

Food safety and hand washing were conducted with children 2-5 years of age in child daycare, preschool, and head start programs. The nutrition educator used stuffed Elmo with the lesson to enforce the idea that "germs are bad." A story is told about Elmo going to school and forgetting to wash his hands before he eats, after using the restroom, and how his friends coughed and sneezed on him. Glitters, or "germs," are sprinkled on Elmo after each incident to show how the germs are spread. We then lay Elmo down to sleep, because he is sick. We then review how to cough, sneeze, and wash our hands correctly. Each student goes through the steps of washing their hands, using soap and warm water, to get rid of the germs. A retrospective post test was

conducted.

### **Results**

The results revealed that 96.7% of the children washed their hands appropriately before handling food at the end of the school year as compared to the beginning of the school.

## **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

### **Outcome #3**

#### **1. Outcome Measures**

Number of participants scoring a required minimum of 70% on post test and national examination.

#### **2. Associated Institution Types**

- 1862 Extension

#### **3a. Outcome Type:**

Change in Knowledge Outcome Measure

#### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	395

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

Foodborne illness is responsible for approximately 76 million and 5,000 deaths per year in the United States. Approximately 325,000 Americans will require hospitalization yearly because of something they ate. While it is difficult to determine the total costs of foodborne illness due to many conditions such as reduced productivity, lost wages, human suffering, and medical costs that go unreported, most experts agree that the annual costs in the United States is between 10 and 83 billion dollars. The individuals most at risk of contracting a foodborne illness include the elderly, young children and pregnant women.

##### **What has been done**

The DC Food Handler Certification training provides a preparatory education program for persons who are interested in becoming certified as a professional food manager. The 20-hour training identifies conditions that promote food borne illness and examines the safe and sanitary methods

for handling, preparations and storage of food, both raw and cooked. Immediately following the completion of the training the national certification and the DC Code examinations are administered. Individuals who pass the exams receive a certificate from the national office and a certificate from the Center for Nutrition, Diet and Health for the DC Code exam. A total of 18 individuals from the Regeneration House of Praise (Church in the Field) received the training. Many of the participants were returning citizens. The individuals were divided into two sessions. The first session was offered in October 2012 and the second session was in February 2013. Prior to the start of instructions a pretest was administered and immediately following the instructions a posttest was administered. Additionally, the DC Code Examination and the National Certification exam were administered. The pretest posttest and DC Code Exam are scored by the program assistant using a scored key sheet and the National Certification Examination is scored by the National Program Office. All of the participants live in Ward 8.

### Results

The results showed that 100% of the participants enrolled completed the training. Additionally, 100% of the participants passed the national certification exam. The mean score on the pretest was 61%, posttest was 87%, DC Code Exam was 78%, and the national exam was 89%. The national exam scores had a high of 96% with a low of 81%. The Food Handler Certification Card is provided by the DC Department of the Environment. A comparison of the pretest and posttest group mean scores show an average gain in food handling sanitation knowledge of about 26 percentage points across all participants in the posttest over the pretest. To test this gain for statistical significance, a paired samples t-test was performed using Predictive Analytical Software (PASW/SPSS). The t-value was found to be statistically significant ( $p < .05$ ), suggesting that there was a significant gain or increase in knowledge food handling as a result of the training. Similarly, a comparison of the pretest and national examination group mean scores also reveal a significant average gain of about 28 percentage points in the national exam over the pretest, and the t-value also proved to be statistically significant ( $p < .05$ ) and further confirms the significant knowledge gain on the part of trainees. (Social scientists have generally accepted that if the p-value is less than 0.05 then the result is considered statistically significant. In other words, there is 95% likelihood that the mean differences between the posttest and pretest, and between the national exam and pretest, represent valid gains in scores or knowledge)

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

### V(H). Planned Program (External Factors)

#### External factors which affected outcomes

- Appropriations changes
- Government Regulations

#### Brief Explanation

{No Data Entered}

## **V(I). Planned Program (Evaluation Studies)**

### **Evaluation Results**

Change in knowledge, behavior and in some instants change in condition.

### **Key Items of Evaluation**

Retrospective Post Testa

Paired t-test using Predictive Analytical Software (PASW/SPSS).