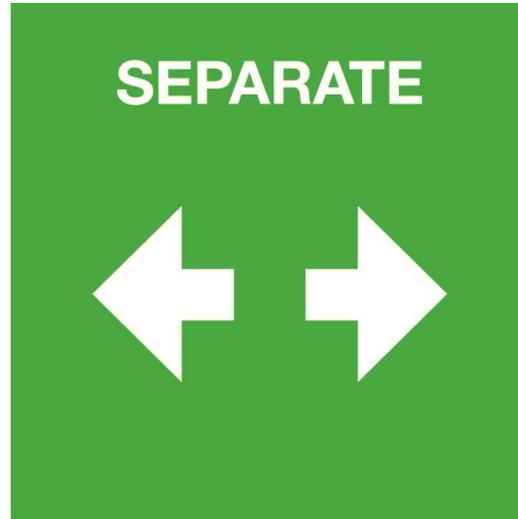


# 2013 Milwaukee Health Department Food Safety Report



Release Date: March 2014

## Introduction

### Background and Significance

Foodborne illness in the United States is a major cause of personal distress, preventable illness and death, and avoidable economic burden. CDC estimates that each year roughly one in six Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases. The annual cost of foodborne illness in terms of pain and suffering, reduced productivity, and medical costs is estimated to be as much as \$77 billion. Nationwide, approximately 1,000 reported disease outbreaks are identified each year. Of the outbreaks with an identified cause, half are attributed to restaurants. However, most foodborne illnesses occur in persons who are not part of any recognized outbreaks.

Though the magnitude of the challenge of addressing foodborne illness upon initial review may seem insurmountable, potential intervention strategies have been documented as being effective in improving food safety. It is because of the scope of the issue and the availability of evidence based practices to address the issue that CDC has designated food safety as one of its key public health strategies. CDC has food safety as one of 10 winnable battles (<http://www.cdc.gov/winnablebattles/>). It is for these same reasons why the City of Milwaukee Health Department (MHD) has selected it as one of our key public health outcomes. In our efforts to improve food safety, the Department’s Consumer Environmental Health Division’s (CEH) intervention strategies can be grouped into three broad categories:

- Regulatory strategies - to assure the adoption of science-based food safety principles in retail and foodservice settings to minimize the incidence of foodborne illness
- Education and Outreach - to assure inspectors, operators, and consumers are adequately informed of the causes of foodborne illness and the key strategies to prevent foodborne illness
- Surveillance and Investigation - to assure the timely identification and response to foodborne illness in order to minimize morbidity and mortality

Figure 1: Food Safety Interventions



### Purpose

This report is provided in accordance with Chapter 68-03 of the Milwaukee Code of Ordinances, which requires that the City of Milwaukee Health Department (MHD) annually report to the Common Council and Mayor on sanitary conditions in food establishments. This report is submitted in place of the annual “Compliance Report on Sanitary Conditions.” Furthermore this report supports the complaint data analysis and review requirements of FDA Voluntary National Retail Food Regulatory Program Standard No. 5: Foodborne Illness and Food Defense Preparedness and Response as well as with the risk factor study requirements under Standard No. 9: Program Assessment.

The FDA Voluntary National Retail Food Regulatory Program Standards represent effective evidence-based practices for retail food regulatory program.<sup>1</sup> The standards focus on the reduction of risk factors known to cause or contribute to foodborne illness and the promotion of active managerial control of these risk factors. The nine standard self-assessment tools provide a framework for evaluation of the effectiveness of food safety interventions implemented by the Department.

<sup>1</sup> FDA Voluntary National Retail Food Regulatory Program Standards  
<http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/ProgramStandards/ucm245409.htm>

## Guiding Principles

Food safety activities conducted by the Department are guided by the 10 Essential Environmental Public Health Services, which are:

1. Monitor environmental and health status to identify and solve community environmental public health problems
2. Diagnose and investigate environmental public health problems and health hazards in the community
3. Inform, educate, and empower people about environmental public health issues
4. Mobilize community partnerships and actions to identify and solve environmental health problems
5. Develop policies and plans that support individual and community environmental public health efforts
6. Enforce laws and regulations that protect environmental public health and ensure safety
7. Link people to needed environmental public health services and assure the provision of environmental public health services when otherwise unavailable
8. Assure a competent environmental public health workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based environmental public health services
10. Research for new insights and innovative solutions to environmental public health problems

## Cost Effectiveness

The overall average cost per case of foodborne illness is estimated to be between \$1,068 and \$1,626.<sup>2</sup> Using the annual frequency of occurrence of foodborne illness determined by CDC of one in six people translates to approximately 99,800 cases of foodborne illness annually in the city based on 2012 U.S. Census population estimates. That places the annual estimated economic burden of foodborne illness for the city at \$106 to \$162 million per year. A 10% decrease in foodborne illness would result in a net savings of \$10 to \$16 million.

Though the potential cost savings for even a modest improvement in food safety is substantial, little data exists to establish the cost effectiveness of any one individual intervention strategy, further supporting the multifaceted intervention strategy being utilized by the department.

## Regulatory

---

Regulatory strategies to improve food safety work to assure the adoption of science-based food safety principles in retail and foodservice settings to minimize the incidence of foodborne illness. Activities performed by the Department include plan review and pre-inspection of new or remodeled food establishments, routine annual inspection of food establishments, and the development and implementation of policies that support food safety. Compliance and enforcement activities focus on critical risk factors, which are the risk factors known to contribute to foodborne illness. The five major risk factors are:

- Improper holding temperatures
- Inadequate cooking
- Cross contamination
- Food from unsafe sources
- Poor personal hygiene

The City Clerk's Office is a key partner in implementing regulatory controls. The City Clerk's Licensing Division issues all food dealer's permits, food peddler permits and temporary food permits while the Legislative Reference Bureau takes the lead on drafting changes to local ordinances.

---

<sup>2</sup> Scharff RL. Economic burden from health losses due to foodborne illness in the United States. *J Food Protect* 2012;75(1):123-31

**Regulatory Performance Measures/Goals**

| Inspection   | Status |
|--|--------|
| All permanent food establishments receive an inspection prior to operating   | ✓      |
| All food establishments receive a minimum of one inspection per year   | ✓      |
| All food peddlers receive at least one inspection per year   | ✓      |
| All schools receive at least two annual routine inspections  | ✓      |
| All retail establishments that process food and all moderate or complex restaurants receive two annual inspections | ✗      |

| Enforcement   | Status |
|---|--------|
| All critical violations receive a re-inspection   | ✓      |
| All critical violations receive a re-inspection within 10 business days of the compliance deadline    | ✗      |
| Less than 20% of all routine inspections have one or more critical violations upon routine inspection | ✗      |

| Policy  | Status |
|---|--------|
| CEH is actively engaged in food policy at the local level   | ✓      |
| CEH is actively engaged in food policy at the state level   | ✓      |
| CEH is actively engaged in food policy at the federal/national level  | ✓      |
| All CEH policies/procedures have been updated and reviewed within the past 24 months  | ✗      |
| All agreements/MOUs have been updated and reviewed/resigned within the past 60 months   | ✗      |
| CEH has adequate program support to meet FDA minimum inspection staffing requirements   | ✗      |
| An adequate regulatory foundation is in place to support inspection, compliance and enforcement activities in food establishments | ✗      |

**Activity Tracking**

Facilities

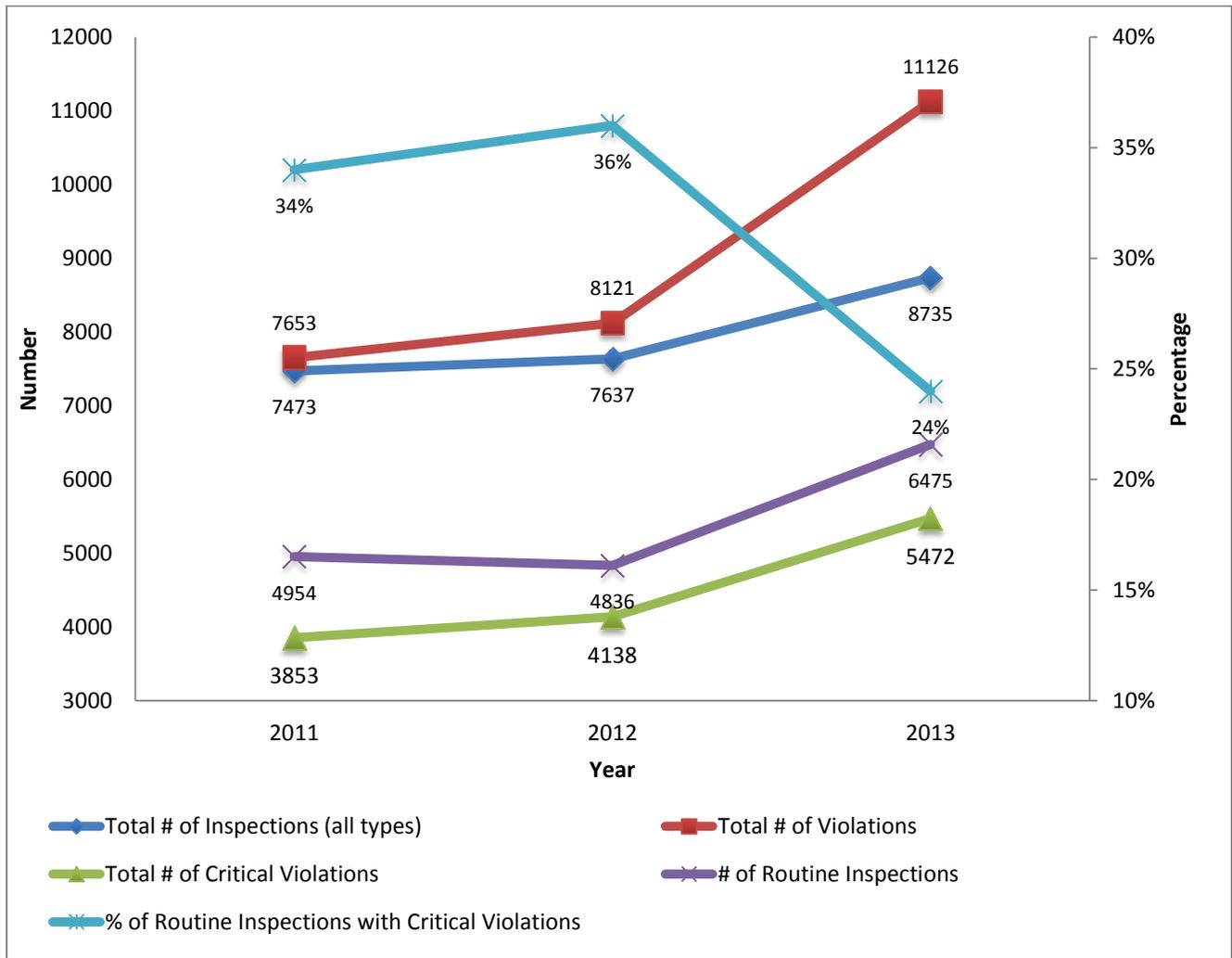
|  |       |
|--|-------|
| Number of restaurants.....   | 1,564 |
| Number of additional restaurant sites.....   | 149   |
| Number of retail food establishment.....   | 1,258 |
| Number of schools* .....   | 310   |
| Number of community food programs .....  | 82    |
| Number of taverns .....  | 315   |
| Total number of establishments requiring inspection (includes licensed and unlicensed) ..... | 3,678 |

\*Does not include schools issued a restaurant license, only those exempt from licensure

Mobile and Temporary Food Establishments

|  |       |
|--|-------|
| Number of peddler vehicles .....                     | 110   |
| Number of peddler carts .....                        | 221   |
| Number of carried containers .....                   | 13    |
| Number of temporary food establishments .....        | 884   |
| Number of farmers' markets.....                      | 169   |
| Total number of peddler/special event licenses ..... | 1,397 |
| Total number of special events inspected .....       | 104   |

**Figure 2: Trends in Food Establishment Inspection and Violations, 2011-2013**



## 2013 Milwaukee Health Department Food Safety Report

### Food Establishment Inspections and Critical Violations Citywide, 2011-2013

|   |                     | 2011 | 2012 | 2013  | 3-Year Avg. |
|---|---------------------|------|------|-------|-------------|
| Total # of Inspections (all types)                |                     | 7473 | 7637 | 8735  | 7948        |
| Inspections by Type                               | Retail              | 2315 | 2378 | 2783  | 2492        |
|   | Restaurant          | 4455 | 4484 | 5139  | 4693        |
|   | School              | 703  | 775  | 813   | 764         |
| Total # of Violations                             |                     | 7653 | 8121 | 11126 | 8967        |
| Total # of Critical Violations                    |                     | 3853 | 4138 | 5472  | 4488        |
| # of Routine Inspections                          |                     | 4954 | 4836 | 6475  | 5422        |
| # of Routine Inspections with Critical Violations |                     | 1693 | 1748 | 1523  | 1655        |
| % of Routine Inspections with Critical Violations |                     | 34%  | 36%  | 24%   | 31%         |
| Violations by Critical Risk Category              | Unsafe Source       | 113  | 116  | 185   | 138         |
|   | Inadequate Cooking  | 11   | 29   | 18    | 19          |
|   | Improper Hold       | 914  | 993  | 1303  | 1070        |
|   | Cross Contamination | 983  | 1026 | 1340  | 1116        |
|   | Personal Hygiene    | 1175 | 1202 | 1603  | 1327        |
|   | Other               | 657  | 772  | 1023  | 817         |

### Food Establishment Inspections and Critical Violations by Aldermanic District, 2013

| 2013            | All Inspections  |                 |                          | Routine Inspections      |                            |                            | Violation by Risk Categories |                    |               |                     |                  |       |     |
|-----------------|------------------|-----------------|--------------------------|--------------------------|----------------------------|----------------------------|------------------------------|--------------------|---------------|---------------------|------------------|-------|-----|
|                 | # of Inspections | # of Violations | # of Critical Violations | # of Routine Inspections | # with Critical Violations | % with Critical Violations | Unsafe Source                | Inadequate Cooking | Improper Hold | Cross Contamination | Personal Hygiene | Other |     |
| <b>Citywide</b> | 8735             | 11126           | 5472                     | 6475                     | 1523                       | 24%                        | 185                          | 18                 | 1303          | 1340                | 1603             | 1023  |     |
| <b>District</b> | 1                | 315             | 404                      | 207                      | 256                        | 68                         | 27%                          | 6                  | 1             | 34                  | 69               | 60    | 37  |
|                 | 2                | 415             | 670                      | 298                      | 258                        | 75                         | 29%                          | 13                 | 1             | 60                  | 81               | 88    | 55  |
|                 | 3                | 931             | 956                      | 555                      | 649                        | 180                        | 28%                          | 15                 | 1             | 141                 | 118              | 172   | 108 |
|                 | 4                | 1401            | 1543                     | 833                      | 1091                       | 232                        | 21%                          | 24                 | 3             | 250                 | 146              | 255   | 155 |
|                 | 5                | 481             | 882                      | 448                      | 336                        | 102                        | 30%                          | 10                 | 1             | 95                  | 127              | 131   | 84  |
|                 | 6                | 448             | 671                      | 328                      | 364                        | 101                        | 28%                          | 25                 | 0             | 37                  | 79               | 123   | 64  |
|                 | 7                | 317             | 450                      | 194                      | 226                        | 58                         | 26%                          | 7                  | 0             | 31                  | 67               | 53    | 36  |
|                 | 8                | 414             | 445                      | 226                      | 341                        | 70                         | 21%                          | 18                 | 0             | 56                  | 52               | 68    | 32  |
|                 | 9                | 493             | 778                      | 372                      | 317                        | 84                         | 26%                          | 14                 | 2             | 95                  | 108              | 87    | 66  |
|                 | 10               | 476             | 473                      | 234                      | 374                        | 96                         | 26%                          | 3                  | 0             | 46                  | 62               | 81    | 42  |
|                 | 11               | 393             | 490                      | 220                      | 301                        | 53                         | 18%                          | 4                  | 1             | 67                  | 68               | 60    | 20  |
|                 | 12               | 814             | 1081                     | 548                      | 633                        | 131                        | 21%                          | 11                 | 3             | 129                 | 120              | 158   | 127 |
|                 | 13               | 651             | 735                      | 336                      | 487                        | 93                         | 19%                          | 7                  | 0             | 110                 | 94               | 73    | 52  |
|                 | 14               | 638             | 743                      | 335                      | 493                        | 87                         | 18%                          | 9                  | 1             | 85                  | 73               | 95    | 72  |
|                 | 15               | 511             | 805                      | 338                      | 348                        | 93                         | 27%                          | 19                 | 4             | 67                  | 76               | 99    | 73  |

## 2013 Milwaukee Health Department Food Safety Report

### Food Establishment Inspections and Critical Violations by Aldermanic District, 2012

| 2012            | All Inspections  |                 |                          | Routine Inspections      |   |   | Violation by Risk Categories |                    |               |                     |                  |       |     |
|-----------------|------------------|-----------------|--------------------------|--------------------------|---|---|------------------------------|--------------------|---------------|---------------------|------------------|-------|-----|
|                 | # of Inspections | # of Violations | # of Critical Violations | # of Routine Inspections | # of Inspections with Critical Violations | % of Inspections with Critical Violations | Unsafe Source                | Inadequate Cooking | Improper Hold | Cross Contamination | Personal Hygiene | Other |     |
| <b>Citywide</b> | 7637             | 8121            | 4138                     | 4836                     | 1748                                      | 36%                                       | 116                          | 29                 | 993           | 1026                | 1202             | 772   |     |
| <b>District</b> | 1                | 322             | 281                      | 121                      | 204                                       | 48  | 24%                          | 8                  | 2             | 18                  | 33               | 37    | 23  |
|                 | 2                | 272             | 248                      | 122                      | 173                                       | 47  | 27%                          | 5                  | 0             | 38                  | 29               | 37    | 13  |
|                 | 3                | 706             | 907                      | 513                      | 444                                       | 197                                       | 44%                          | 10                 | 5             | 117                 | 140              | 140   | 101 |
|                 | 4                | 1309            | 1255                     | 638                      | 807                                       | 303                                       | 38%                          | 15                 | 8             | 202                 | 101              | 175   | 137 |
|                 | 5                | 499             | 679                      | 338                      | 275                                       | 134                                       | 49%                          | 4                  | 0             | 94                  | 107              | 94    | 39  |
|                 | 6                | 692             | 939                      | 468                      | 392                                       | 181                                       | 46%                          | 7                  | 5             | 77                  | 145              | 136   | 98  |
|                 | 7                | 318             | 382                      | 196                      | 196                                       | 68  | 35%                          | 6                  | 0             | 50                  | 56               | 53    | 31  |
|                 | 8                | 324             | 229                      | 108                      | 243                                       | 47  | 19%                          | 3                  | 1             | 33                  | 20               | 28    | 23  |
|                 | 9                | 314             | 181                      | 109                      | 220                                       | 58  | 26%                          | 4                  | 0             | 31                  | 29               | 33    | 12  |
|                 | 10               | 462             | 472                      | 273                      | 298                                       | 115                                       | 39%                          | 10                 | 0             | 47                  | 79               | 108   | 29  |
|                 | 11               | 348             | 337                      | 169                      | 190                                       | 88  | 46%                          | 1                  | 1             | 43                  | 34               | 67    | 23  |
|                 | 12               | 598             | 583                      | 252                      | 436                                       | 100                                       | 23%                          | 14                 | 2             | 54                  | 62               | 69    | 51  |
|                 | 13               | 499             | 472                      | 274                      | 327                                       | 131                                       | 40%                          | 2                  | 2             | 77                  | 55               | 81    | 57  |
|                 | 14               | 494             | 667                      | 315                      | 332                                       | 117                                       | 35%                          | 14                 | 0             | 70                  | 81               | 69    | 81  |
|                 | 15               | 480             | 489                      | 242                      | 299                                       | 114                                       | 38%                          | 13                 | 3             | 42                  | 55               | 75    | 54  |

### Food Establishment Inspections and Critical Violations by Aldermanic District, 2011

| 2011            | All Inspections  |                 |                          | Routine Inspections      |                            |                            | Violation by Risk Categories |                    |               |                     |                  |       |     |
|-----------------|------------------|-----------------|--------------------------|--------------------------|----------------------------|----------------------------|------------------------------|--------------------|---------------|---------------------|------------------|-------|-----|
|                 | # of Inspections | # of Violations | # of Critical Violations | # of Routine Inspections | # with Critical Violations | % with Critical Violations | Unsafe Source                | Inadequate Cooking | Improper Hold | Cross Contamination | Personal Hygiene | Other |     |
| <b>Citywide</b> | 7473             | 7653            | 3853                     | 4954                     | 1693                       | 34%                        | 113                          | 11                 | 914           | 983                 | 1175             | 657   |     |
| <b>District</b> | 1                | 367             | 472                      | 194                      | 259                        | 71                         | 27%                          | 8                  | 0             | 32                  | 42               | 70    | 42  |
|                 | 2                | 375             | 491                      | 198                      | 227                        | 87                         | 38%                          | 15                 | 0             | 40                  | 54               | 50    | 39  |
|                 | 3                | 600             | 528                      | 295                      | 420                        | 134                        | 32%                          | 6                  | 1             | 59                  | 90               | 77    | 62  |
|                 | 4                | 1156            | 1131                     | 583                      | 728                        | 274                        | 38%                          | 16                 | 2             | 148                 | 133              | 177   | 107 |
|                 | 5                | 509             | 635                      | 354                      | 307                        | 142                        | 46%                          | 4                  | 1             | 125                 | 88               | 93    | 43  |
|                 | 6                | 513             | 719                      | 297                      | 329                        | 126                        | 38%                          | 9                  | 2             | 50                  | 103              | 84    | 49  |
|                 | 7                | 368             | 481                      | 228                      | 213                        | 93                         | 44%                          | 5                  | 0             | 59                  | 61               | 65    | 38  |
|                 | 8                | 376             | 266                      | 118                      | 257                        | 63                         | 25%                          | 7                  | 1             | 34                  | 22               | 35    | 19  |
|                 | 9                | 397             | 382                      | 183                      | 269                        | 80                         | 30%                          | 3                  | 0             | 47                  | 66               | 41    | 26  |
|                 | 10               | 443             | 420                      | 253                      | 308                        | 106                        | 34%                          | 5                  | 0             | 42                  | 61               | 99    | 46  |
|                 | 11               | 351             | 302                      | 162                      | 218                        | 83                         | 38%                          | 2                  | 1             | 62                  | 25               | 53    | 19  |
|                 | 12               | 703             | 506                      | 230                      | 508                        | 108                        | 21%                          | 9                  | 0             | 67                  | 44               | 74    | 36  |
|                 | 13               | 528             | 545                      | 344                      | 344                        | 155                        | 45%                          | 6                  | 2             | 83                  | 81               | 120   | 52  |
|                 | 14               | 348             | 188                      | 122                      | 277                        | 55                         | 20%                          | 2                  | 0             | 27                  | 35               | 41    | 17  |
|                 | 15               | 439             | 587                      | 292                      | 290                        | 116                        | 40%                          | 16                 | 1             | 39                  | 78               | 96    | 62  |

Peddler Inspections, 2011-2013

|   | 2011 | 2012 | 2013 | 3-Year Avg. |
|---|------|------|------|-------------|
| Total Number of Inspection Occurrences                | 443  | 615  | 640  | 566         |
| Total Number of Violations                            | 346  | 303  | 326  | 325         |
| Total Number of Inspections with a Critical Violation | 33   | 65   | 67   | 55          |
| % of Occurrences with a Critical Violation            | 7%   | 11%  | 10%  | 9%          |

Workforce

|   |    |
|---|----|
| Number of FTEs assigned to conduct food inspections (fully staffed, all inspection types) | 18 |
| Number of FTEs assigned to conduct weights and measures inspections                       | 3  |
| Number of FTEs involved in technical support, management and administrative support       | 5  |
| Total number of FTEs in CEH   | 26 |
| Number of standardized trainers   | 2  |

Workload/Staffing Projections

| Category  | Operators   | Multiplier*                                     | Inspections Needed |
|---|-------------|---|--------------------|
| Restaurants                                     | 1564        | 2.2   | 3441               |
| Restaurants - Additional Sites                  | 149         | 2.2   | 328                |
| Retail  | 1258        | 2.2   | 2768               |
| Schools   | 310         | 2.2   | 682                |
| Taverns   | 315         | 1.1   | 347                |
| Meal Service Sites                              | 82          | 2.2   | 180                |
| Peddlers - Restaurant                           | 207         | 1.1   | 228                |
| Peddlers - Retail                               | 137         | 1.1   | 151                |
| Complaints**                                    | 585         | 1.1   | 644                |
| Farmers' Market**                               | 169         | 1   | 169                |
| Temporary Events**                              | 884         | 1   | 884                |
| <b>Total Operators</b>                          | <b>5660</b> | <b>Total Inspections</b>                        | <b>9820</b>        |
| <b>Total Establishments***</b>                  | <b>4022</b> |   |                    |
| <b>Establishments per Inspector FTE</b>         | <b>223</b>  | <b>Inspections per Inspector FTE</b>            | <b>546</b>         |
| <b>FDA goal of establishments per FTE</b>       | <b>150</b>  | <b>FDA goal of Inspections per FTE</b>          | <b>280-320</b>     |
| <b>Total FTEs required to meet FDA standard</b> | <b>27</b>   | <b>Total FTEs required to meet FDA standard</b> | <b>33</b>          |
| <b>Existing Inspection FTE</b>                  | <b>18</b>   | <b>Existing Inspection FTE</b>                  | <b>18</b>          |
| <b>Additional FTEs needed</b>                   | <b>9</b>    | <b>Additional FTEs needed</b>                   | <b>15</b>          |

\*Multiplier is the number of inspections required and assumes a conservative 10% reinspection rate per routine inspection. It should be noted that the FDA recommends up to four inspections per year based on risk and our current reinspection rate is more than double that being used in the calculation.

\*\*Complaints, farmer's markets and temporary events are not included in number of establishments total or ratio of inspectors per establishments, however, complaints are considered when looking at the total number of inspections and the ratio of inspectors per FTE.

**Policy**

Members of Consumer Environmental Health are engaged at the local, state and the national level in the development of policy. Activities in 2013 include:

- Collaborated with the City Clerk’s office to introduce legislation to change the licensing period of food establishments
- CEH staff serve on the statewide DATCP/DHS temporary event and equipment committees
- CEH staff serve on the National Association of City and County Health Officials Food Safety Advisory Workgroup
- CEH staff participated on a FDA inspection curriculum review committee

**Education and Outreach**

The purpose of education and outreach is to assure inspectors, operators, and consumers are adequately informed of the causes of foodborne illness and the key strategies to prevent foodborne illness. External education and outreach activities currently conducted by the Department include posting of inspection reports online, development and distribution of fact sheets and guidelines for operators, participation on the Food Safety Council, and operator training sessions. Internal education activities include the development and implementation of a structured curriculum for new inspectors, adopting the FDA procedures for retail food inspector standardization and quality assurance.

CEH has two key partners in implementing education and outreach activities, the Health Department’s Communications and Graphics section which assists with website and educational material development as well as media issues, and ITMD which maintains the online inspection portal.

**Education and Outreach Performance Measures/Goals**

| Industry   | Status  |
|--|---|
| An actively engaged food safety advisory committee that meets at least annually to review and discuss food safety policy |  |
| CEH is actively involved in industry sponsored forums  |  |
| Provided at least 50 food establishment operator trainings per year  |  |
| Provided training to at least 250 operators per year   |  |
| All operator education materials are reviewed and updated (when required) every 36 months                                |  |
| Implemented strategies to increase food safety awareness   |  |

| Consumers   | Status  |
|---|---|
| All retail and restaurant routine food inspections are available online                   |  |
| All consumer education materials are reviewed and updated (when required) every 36 months |  |
| CEH is actively involved in community sponsored forums                                    |  |
| Increase the proportion of consumers who follow key food safety practices                 |  |

| Inspectors   | Status |
|--|--------|
| 100% of inspectors with 18 or months of experience that have completed the FDA core food inspection curriculum | ✓      |
| 100% of inspectors with 18 or months of experience that have completed standardization                         | ✗      |
| 100% of coordinators and supervisors are state standardized  | ✗      |
| 100% of inspectors, coordinators and supervisors receive 16 hours of relevant continuing education per year    | ✓      |
| 100% of inspectors with 18 or months of experience have taken a retail HACCP course within the past 5 years    | ✓      |
| <20% of inspectors have less than two years of experience in food inspection                                   | ✗      |

### Activity Tracking

#### Industry/Consumer

|   |     |
|---|-----|
| Number of food handler training sessions performed..... | 58  |
| Number of food handlers trained .....                   | 191 |

#### Regulatory Staff

|   |      |
|---|------|
| % of inspectors with more than 18 months experience who have completed core training curriculum ..... | 100% |
| % of inspectors with more than 18 months experience who have completed standardization .....          | 88%  |
| % of inspectors with less than 24 months of experience .....  | 56%  |
| % of CEH staff with less than 24 months experience in their position.....                             | 58%  |

### Surveillance & Investigation

The purpose of disease surveillance and investigation is to assure the timely identification and response to foodborne illness in order to minimize morbidity and mortality. Interventions include the investigation of all cases of reportable enteric disease, the investigation of all outbreaks or potential outbreaks, the evaluation of communicable disease, inspection and complaint investigation findings to identify trends and evaluate program performance and the testing of clinical and food samples to identify foodborne disease or food contamination. Enteric diseases are bacterial or viral infections that enter the body through the mouth and intestinal tract and are usually spread through contaminated food and water or by contact with vomit or feces. Enteric diseases are the causative agents of foodborne illness.

Key partners in the surveillance and investigation include the MHD Public Health Laboratory which conducts analysis of clinical, environmental and food samples and MHD Communicable Disease (CD) Program which investigates reportable disease. Members from CEH, CD, and the Lab all serve on the Department’s Outbreak Response Team/Foodborne Illness Workgroup.

### Surveillance and Investigation Performance Measures/Goals

| Investigation   | Status |
|---|--------|
| 100% of foodborne illness complaints are investigated, the final disposition for each complaint is obtained and tracked   | ✓      |
| 100% of foodborne illness complaints investigations are initiated within 1 business day of being reported to the department   | ✓      |
| The department has an active functioning multidisciplinary outbreak team with defined roles and responsibilities and written policies and procedures reviewed in the previous 24 months | ✓      |

| Surveillance   |   |
|--|---|
| Incidence of key enteric disease is at or below the Healthy People 2020 target   | ✘ |
| An annual review of communicable disease, inspection and complaint data is performed to identify trends and possible risk factors related to food safety and foodborne illness | ✔ |
| An active retail food sampling program is in place to identify bacterial contamination in high risk foods  | ✔ |

| Case Management  | Status |
|--|--------|
| 100% of reportable cases of enteric disease in Milwaukee residents are investigated  | ✔      |
| Investigation of cases of reportable enteric disease are initiated within 2 business days of report to the department  | ✔      |
| 100% of food handlers who are either cases of enteric disease or contacts to cases of enteric diseases are evaluated to determine if work restrictions and/or clinical testing is required | ✔      |

### Activity Tracking

#### Complaint Investigations

| Type of Complaint        | 2011 | 2012 | 2013 | 3-Year Average |
|--------------------------|------|------|------|----------------|
| Foreign Object           | 3    | 20   | 25   | 16             |
| Illness                  | 44   | 73   | 84   | 67             |
| Labeling                 | 6    | 3    | 7    | 5              |
| Quality/Unwholesome Food | 58   | 99   | 124  | 94             |
| Facility Cleanliness     | 49   | 77   | 111  | 79             |
| Pests/Vermin             | 27   | 41   | 42   | 37             |
| Other/ Miscellaneous     | 25   | 44   | 128  | 66             |
| Facility Repairs         | 3    | 3    | 8    | 5              |
| Garbage/Litter           | 17   | 31   | 37   | 43             |
| Personal Hygiene         | 25   | 36   | 19   | 27             |
| Total Food Complaints    | 257  | 427  | 585  | 423            |

#### Cases of Enteric Disease

| Cases Reported       | 2011 | 2012 | 2013 | Three Year Average | Estimated # of Cases Per Case Reported <sup>3</sup> | Total Estimated Cases 2013 | Total Estimated Cases Three Year Average |
|----------------------|------|------|------|--------------------|---|----------------------------|--|
| <b>Campylobacter</b> | 49   | 52   | 57   | 52.6               | 30  | 1710                       | 1578                                     |
| <b>E. coli 0157</b>  | 16   | 8    | 11   | 11.6               | 26  | 286                        | 302                                      |
| <b>Listeria</b>      | 1    | 1    | 2    | 1.3                | 2   | 4                          | 2.6                                      |
| <b>Salmonella</b>    | 66   | 84   | 69   | 73                 | 29  | 2001                       | 2117                                     |
| <b>Vibrio</b>        | 0    | 0    | 1    | 0.3                | 142   | 142                        | 43                                       |
| <b>Yersinia</b>      | 3    | 0    | 2    | 1.6                | 123   | 246                        | 197                                      |

<sup>3</sup> FoodNet Progress Report <http://www.cdc.gov/foodnet/data/trends/trends-2012-progress.html>

### Incidence of Enteric Disease

| Incidence per 100,000 Population | 2011 | 2012 | 2013 | Three Year Average | 2012 National Rate | 2020 Target <sup>4</sup> | Status |
|----------------------------------|------|------|------|--------------------|--------------------|--------------------------|--------|
| <b>Campylobacter</b>             | 8.2  | 8.7  | 9.6  | 8.8                | 14.3               | 8.5                      | ✗      |
| <b>E. coli 0157</b>              | 2.7  | 1.3  | 1.8  | 2.0                | 1.12               | 0.6                      | ✗      |
| <b>Listeria</b>                  | 0.2  | 0.2  | 0.3  | 0.2                | 0.25               | 0.2                      | ✗      |
| <b>Salmonella</b>                | 11.1 | 14.1 | 11.6 | 12.3               | 16.42              | 11.4                     | ✗      |
| <b>Vibrio</b>                    | 0.0  | 0.0  | 0.2  | 0.1                | 0.41               | 0.2                      | ✓      |
| <b>Yersinia</b>                  | 0.5  | 0.0  | 0.3  | 0.3                | 0.33               | 0.3                      | ✓      |

### CIFOR Team Investigation

|                | 2011 | 2012 | 2013 | Three Year Average |
|----------------|------|------|------|--------------------|
| Investigations | 3    | 5    | 4    | 4                  |

### Food Sampling Program

|                                      | Deli | Frozen Dessert | Beef | Total |
|--------------------------------------|------|----------------|------|-------|
| <b># of establishments sampled</b>   | 61   | 67             | 59   | 187   |
| <b># of samples tested</b>           | 34   | 340            | 106  | 480   |
| <b># of high counts</b>              | 0    | 114            | 5    | 119   |
| <b>% of samples with high counts</b> | 0%   | 34%            | 5%   | 25%   |

## Key Accomplishments/Opportunities

### Key food safety accomplishments for 2013:

- Development and implementation of a career ladder to assist in inspector recruitment and retention as well as drive inspector competency and performance
- Increased inspector quality and consistency by implementing an inspector quality assurance and standardization programs.
- Integrated standardization and quality assurance into inspector performance evaluation
- Obtained a 14% increase in food inspections performed between 2012 and 2013
- Introduced legislation at the state level to amend license period of food establishments so that expiration dates would be staggered versus all on the same date

### Key activities planned in 2014 to enhance food safety and to meet key performance goals include:

- Collaborate on resolutions to reorganize and update Milwaukee ordinances related to the licensing and regulation of food establishments
- Propose updates to the ordinances that will address missing elements required for meeting the FDA regulatory foundation standard, including plan review, enforcement and inspection
- Develop and pilot updated compliance and enforcement policies and procedures
- Develop and pilot a more robust plan review process to include equipment and operational changes, rather than solely focusing on remodeling and new construction (pending an update to the ordinance)

<sup>4</sup> Food Safety, Healthy People 2020

<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=14>

- Establish a food safety and policy advisory group to systematically integrate consumers and operators into the development of food safety policy
- Develop of a food establishment grading system in order to translate the complex food establishment inspection report into something easily understood and interpreted by consumers
- Adopt the Lagan system for intake of all complaints
- Complete recruitment of vacant Environmental Health Supervisor and Environmental Health Specialist positions
- Advocate for position authority for adequate program staffing beginning with an additional Environmental Health Coordinator to assist with inspection, grading and enforcement activities
- Complete the initial configuration of Accela /land management as a replacement for CHILi for utilization as an electronic inspection system
- Expand community outreach/education for consumers and operators, including participation in meetings and events in collaboration with members of the Common Council
- Complete the review and updating of existing community and industry education materials and complete a gap analysis to identify additional resources needed
- Develop and implement a career ladder system for EHS coordinators and supervisors