

Executive Summary

Background

On June 25, 2008, the community organization, Hungry for Respect presented a report to the Pima County Board of Health indicating that sanitary conditions varied between grocery chains according to their geographical location. In their presentation, representatives from Hungry for Respect asserted that instances of unsanitary conditions in Food City supermarkets were more prevalent than at the Basha's supermarkets because of several factors, one being the location of the store.

In response to that presentation, the Board of Health asked the Pima County Health Department to ascertain if there is a correlation between the location of grocery stores and their respective sanitary conditions.

Methodology

The Health Department extracted from the database maintained by Consumer Health and Food Safety, the names of grocery stores classified as "supermarkets" that had at least 20,000 square feet. From there, each of the supermarkets was given a "stress index" designation from its physical address correlating to the 2000 Stress Index map published by the Pima County's Geographical Information System Department. The 2000 Stress Index map reflects the information compiled in October 2002 by the City of Tucson, Arizona, Comprehensive Planning Task Force and published in their report entitled, "Indicators of Neighborhood Stress—Measures of Need and Dependency from Census 2000 for Pima County Block Groups." There are seven stress index levels: 1) highest stress, 2) high stress, 3) medium-high stress, 4) medium stress, 5) medium-low stress, 6) low stress and 7) lowest stress.

The Health Department grouped supermarkets based on their stress index level. Routine "unannounced" inspections for each supermarket were chosen from 2003 to 2007, a five year span. The Health Department measured sanitary conditions as a function of the numbers of critical items that had been marked as "not in compliance" with the letter "N." The more critical items marked "N" meant that a supermarket was less sanitary than another supermarket with fewer critical items marked. From these values, relationships were made between them, and the number of inspections and licenses to demonstrate rates of compliance within the stress index level of the supermarket's location.

Findings

The study showed that sanitary conditions were affected by the stress index level of the area in which the supermarket was located. Supermarkets in high stress index areas have critical items from the Food Code marked "not in compliance" ("N") at a rate of 59 percent. For supermarkets in medium-high stress index areas, the rate increases to 69 percent. In contrast, for supermarkets in areas of low stress the rate for "not in compliance" critical items decreases to 20 percent.

The study also showed a discrepancy of inspection rates for supermarkets depending on the stress index. For supermarkets in medium-low stress index areas, the inspection frequency was 66 percent, which is eleven times greater than the actual number of supermarkets in this stress area of 55 percent.

Follow Up Action Plan

The Health Department will investigate to determine the cause of the inspection rate discrepancy between supermarkets in different stress index areas. After determining the cause, the Health Department will take action to achieve consistent inspection frequencies across all stress index areas. The Health Department estimates that it will take 30 days to conduct an internal review and another 30 days to implement changes that are required to procedures, policies, the database to record geo-coding of supermarkets and track information based on stress index values. Results will be immediate as appropriate inspection frequencies are maintained by sanitarians across all levels of stress index areas. These results will be especially significant for supermarkets in high and medium-high stress index areas. The Health Department will keep the Board of Health updated with the progress made.