

The Relationship between Restaurant Ill Worker Policies and Working While Ill

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Introduction

Foodborne illness in the United States is estimated to cause 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths annually (Mead et al. 1999). Centers for Disease Control and Prevention (CDC) surveillance systems show that from 1996 to 2004, foodborne illness incidence reduced for several of the most commonly transmitted foodborne illnesses. But from 2004 to the present, those reductions have not continued (CDC 2008). Thus foodborne illness remains a significant, ongoing problem.

Transmission of pathogens from food workers to the food they are handling is implicated as the etiologic mechanism in approximately 18% of foodborne illness outbreaks (Bryan 1988). Additionally, 93% of foodborne illness outbreaks resulting from food workers' contamination of food involve ill food workers (Ross & Guzewich 1999).

To address this problem, the Food and Drug Administration (FDA) recommends that food service establishments implement policies on dealing with ill workers and describes a number of issues these policies should address, such as when to exclude ill workers from the workplace (FDA 2005).

Purpose

We designed the present study to examine the relationship between ill worker policies and the frequency with which workers work while ill.



Method

This study was conducted by the Environmental Health Specialists Network (EHS-Net), a network of environmental health specialists focused on the study of contributing factors to foodborne illness. EHS-Net is a collaborative project of the CDC, the FDA, the U.S. Department of Agriculture, and state and local health departments in California, Connecticut, Georgia, Iowa, Minnesota, New York, Oregon, Rhode Island, and Tennessee.

Restaurant sample

The sample for this study consisted of randomly selected restaurants in predefined geographical sites in the nine EHS-Net states. Only one restaurant from regional or national chains was included per catchment area, and only English-speaking managers and workers were interviewed. Data collection was anonymous.

Data collection

In 293 restaurants, EHS-Net environmental health specialists conducted

- a manager interview on ill worker policies, and managers' estimates workers' frequency of working while ill.
- a food worker interview on demographics and workers' frequency of working while ill.

Results

Sample demographics

The majority (57%, 168) of restaurants in the sample were independently owned; the rest (43%, 125) were members of chains. On their busiest day, 22% (64) of the restaurants served 100 or fewer meals, 42% (123) served between 100 and 300 meals, and 33% (96) served more than 300 meals (3% [10] of these data were missing).

Presence of ill worker policy

Managers in the majority of restaurants (69%, 201) indicated that their restaurants had an ill worker policy.

Worker frequency of working while ill

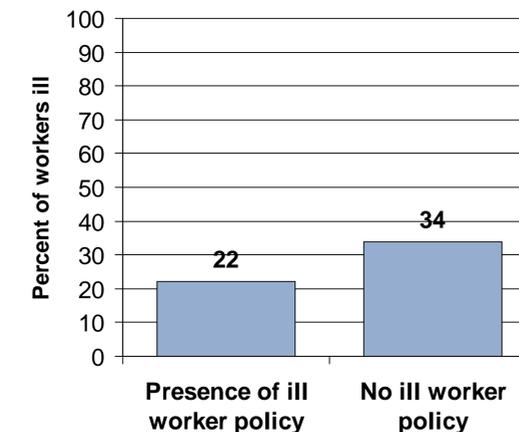
Managers estimated that in the past 3 months, an average of 26% (SD=30.0%, N=260) of their food workers had worked a shift while ill. Over half of food workers (58%, 168 of 290) reported that in the past year, they had worked a shift while ill.

Relationship between policies and working while ill

Managers in restaurants with an ill worker policy estimated significantly lower percentages of food workers who had worked a shift while ill in the past 3 months than managers in restaurants without an ill worker policy (22% vs. 34%; $t(259)=2.87, p<.004$).

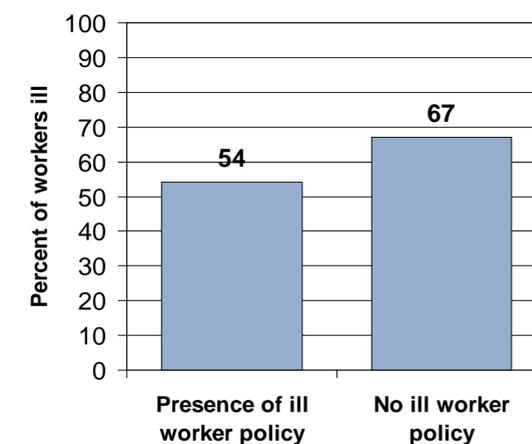
Results (Continued)

Figure 1. Average percent of workers estimated by managers to have worked while ill in the past three months (N=260)



A significantly lower percentage of workers in restaurants with an ill worker policy reported working a shift while ill in the past year than in restaurants without an ill worker policy (54% vs. 67%; $X^2(290)=4.74, p<.04$).

Figure 2. Percent of workers who reported working a shift while ill in the past year (N=290)



Conclusions

These findings indicate that an ill worker policy may reduce the number of food workers who work while ill. Thus, ill worker policies may be an important tool in reducing foodborne illness outbreaks related to ill food workers.

More research is needed to determine the causal nature of this relationship and to determine whether and how specific aspects of ill worker policies are related to workers working while ill.

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