

Food Worker Handwashing and Restaurant Factors

EHS-Net Study Findings and Recommendations

The spread of germs from the hands of food workers to food is an important cause of foodborne illness outbreaks in restaurants. It accounts for 89% of outbreaks in which food was contaminated by food workers. Proper handwashing can reduce germs on workers' hands and the spread of germs from hands to food and from food to other people.

The U.S. Food and Drug Administration (FDA) recommends handwashing before making food and putting on gloves to make food. FDA advises that hands be washed after

- Eating.
- Drinking.
- Using tobacco.
- Coughing.
- Sneezing.
- Using tissue.
- Preparing raw animal products.
- Handling dirty equipment.
- Touching the body (such as scratching your nose).

Handwashing may not always be enough to stop the spread of germs from hands to food. So the FDA recommends use of barriers such as gloves to stop the spread of germs. But research on handwashing and glove use in restaurants shows that these practices do not occur as often as they should. To improve these practices, we must understand factors linked with these practices. We interviewed and watched food workers to collect data on these practices.

What the Study Described

This study looked at how restaurant traits such as number of meals served were linked with food workers' handwashing and glove use practices.

Food workers were more likely to wash their hands when they should

- When they were not busy.
- In restaurants with
 - food-safety training,
 - more than one hand sink, and
 - a hand sink where workers could see it.



This study was conducted by the Environmental Health Specialists Network (EHS-Net). EHS-Net is a federally funded collaboration of federal, state, and local environmental health specialists and epidemiologists working to better understand the environmental causes of foodborne and waterborne illness. Visit EHS-Net at <http://www.cdc.gov/nceh/ehs/EHSNet>.

What the Study Found

Handwashing and glove use rates were highest before food preparation. This suggests that at least some workers may know that food needs to be protected from dirty hands.

Workers wearing gloves when handwashing should occur were less likely to wash their hands at that point than were workers who were not wearing gloves at that point. This suggests that glove use may lead to less handwashing.

Sink accessibility was related to handwashing, which suggests that sink accessibility promotes handwashing. Similarly, glove accessibility is related to glove use.

Workers were more likely to wear gloves in chain restaurants. This suggests that glove use may be partially determined by restaurant managers.

EHS-Net Recommends

Restaurant management and food safety programs should

- Review restaurants' practices and surroundings in light of the findings of this study and highlight potential barriers to and supporters of hand hygiene.
- Know that efforts to improve hand hygiene in restaurants should address the factors that affect hand hygiene behavior.
- Revise food-preparation activities to lower the number of needed handwashings. For example, a sandwich-making process could be revised to lower the number of times a worker has to handle raw meat. This would lower the number of handwashings needed and should increase the odds that workers will wash their hands as needed.

Researchers should conduct more research on factors that affect hand hygiene and on the link between glove use and handwashing.

