

handwashingforlife®

HANDS-ON SYSTEM

assesses risk



The Handwashing®
Leadership Forum

Step One: Assess Risk

Understand
foodborne illness
and assess the risk
for an outbreak in
your operation

The manager or Person-In-Charge (PIC) of a foodservice operation is directly responsible for any disease, or foodborne illness, contracted by their customers or their employees as a result of eating, visiting and/or working at their establishment.

Understanding the nature of pathogens, the legal liability of owners and managers, and the history of human and financial losses related to foodborne illness is important background knowledge for every foodservice operator.

Assessing the risk currently, and often unknowingly, being taken in a foodservice environment is the key to managing the critical control points that can increase, or decrease, that risk.

this section includes

Managing Risk

Five Faces of
Foodborne Illness

The Law

Brand Protection

Outbreak Disasters

**The Science of
Foodborne Illness**

It's a Growing Risk

The Pathogen Pathway

The BUG Chart
-Gallery of Loss

Risk Self Assessment

Customer Assessment

Process Assessment

“Quick Start”
Worksheet & Guide

Electronic Worksheet
(SAW) Guide

After completing this section the Person-In-Charge will:

Understand the impact that foodborne illness can have on their customers, their business and their financial well-being.

Learn the legal realities of “strict liability” and “constructive knowledge”.

Know the sources, behavior, resistance to control and devastating human impact of pathogens.

Assess the RISK for a foodborne outbreak in their operation.

Establish the RISK tolerance level and the key steps needed to manage the RISK in their operation.

Completing this Hands-On program will achieve a level of management control in hand hygiene consistent with the principles of HACCP.

Risk Management

Risk is, and forever will be, synonymous with serving food to the public

“Poor hand hygiene is the single most important contributor to the spread of foodborne illness”

Centers for Disease Control

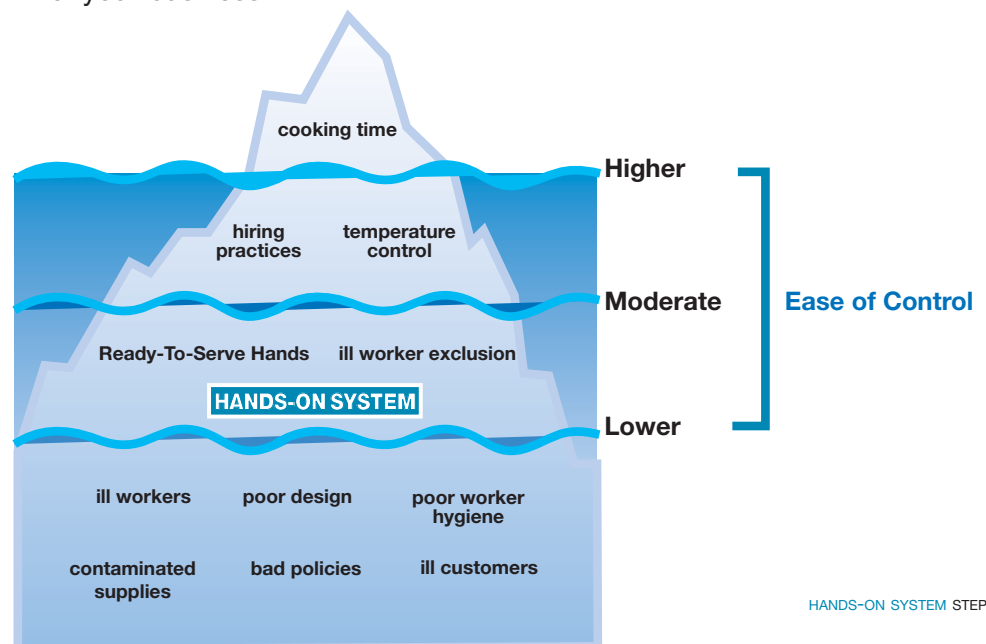
Foodborne illness is just one more factor to manage, but one that must be addressed more aggressively - sufficient to match up with the aggressive lawyers, armed with DNA technology and poised to defend any one of your customers. The threat is much greater than the Workman's Comp, a slip/fall and chipped teeth cases that have dominated the agendas of many risk management departments.

After very successful rounds of investment in temperature control, handwashing is now the biggest single remaining threat to serving safe food. Controlling equipment has proven to be considerably easier than controlling handwashing behaviors. Motivation, training and employee turnover become factors. We must now learn to control a process that has never been under control.

Ignoring handwashing as a priority is easy until faced with a crippling outbreak of foodborne illness. It is often trivialized, feeling that there is nothing that can be done, "we are doing everything we can." Some will correctly say the real problem is keeping ill employees out of the kitchen and keeping ill customers at home (i.e. cruise ship passengers). An understanding of the legal principle of Strict Liability will quickly change that attitude for all but the high-roller risk taker.

This intangible handwashing factor with its lack of standards must be met head-on with the same rigor and level of professionalism as major menu changes. Don't be discouraged by these three realities:

1. The risk will never be zero,
2. The risk is rising in spite of the food getting safer and
3. Ill employees and ill customers are a constant threat to the health of your business.



Five Faces of Foodborne Illness

Is eating out safer than eating at home? Actually it can be thanks to the diligence of operators, regulators and foodservice workers. Unfortunately, even with the best intentions not all foodservice is safe. The five faces of foodborne illness is based on USA statistics provided by the Centers for Disease Control (CDC):

54 billion Safe Meals served

54,000,000,000, at 884,000 locations. Eating out is one of our favorite activities: over 40% of adults eat in a restaurant every day. While most meals are wholesome, some cause illnesses. Just over 50% of the American food dollar is spent on food prepared or served away from home.



76,000,000 foodborne illnesses

1 of every 4 people will "catch" a foodborne illness this year. Typically, you start to feel sick, develop diarrhea and/or vomiting, and start feeling better all in the same day – the "24 hour flu" that isn't the flu!

- The "visible" costs grossly understate the reality:
- Lost work: estimated at billions of dollars each year!
- Lost customers: will never return to "that restaurant"!



3,800,000 Doctor visits

About 5% of the people who get sick from food see a doctor: they may be weak and dehydrated from the "food flu", or they may have a more serious illness, such as Hepatitis A. Most recover in one to three weeks but chronic conditions often are an unexpected consequence.

- Regulatory action: tracking & shutting down "that restaurant"



325,000 Hospitalizations

Some people become very sick, especially children less than 6 years old, pregnant women, adults over 60, and people with other medical conditions, such as liver disease, cancer, organ transplants or immunodeficiency. Many suffer long lasting effects, including rheumatoid arthritis, Crohn's disease and Guillain-Barre syndrome, causing life-long suffering and cost.

- Legal action: litigation, fines and settlement costs



5000 Deaths

While most people recover from foodborne illness, many don't. About 14 people die each day from something they ate or drank. Highly susceptible people are most at risk, but some foodborne diseases have unusually high mortality rates even among the healthy (these include *listeria monocytogenes*, *vibrio parahemolyticus*, and *E. coli* 0157 H:7)

- Media: the worst publicity...continues for weeks.
- Lost customers: "other" restaurants chosen.
- Depression: personal toll on owners/managers/staff



The Law & Foodborne Illness

Understanding the law surrounding foodborne illness is an important step in helping establish your risk and your position under the law.

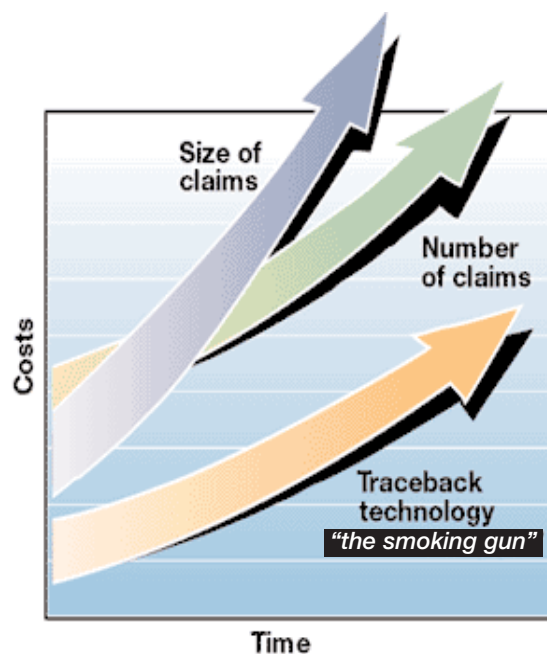
Foodborne illness lawsuits are on the rise, and settlements continue to increase.

A widespread outbreak of foodborne illness is a public health crisis. When government authorities implicate a foodservice operation as the cause of the outbreak, it is a crisis with implications both legal and commercial.

Breaking the law is clearly a risk, but the bigger risk is any injury or loss of life sustained by your customer. Virtually all those who prepare food do so within the parameters of the law. The industry's Plan Review process assures the basics of facility compliance. Unfortunately, many operators stop there.

While most operators understand that an outbreak of foodborne illness makes for bad publicity and it is therefore bad for business, few fully understand the legal standard that will determine their liability to the people injured as part of the outbreak. Indeed many operators assume that so long as the operation was “state of the art”, and that they did “nothing wrong”, there is no risk of lawsuits. They also assume that if the problem that gave rise to the outbreak had not yet been discovered, the restaurant operation cannot be held responsible. Both of these assumptions are wrong

Doctrines of strict liability and constructive knowledge hold that a restaurant operation is liable regardless of fault or actual knowledge.



The Law & Foodborne Illness

Strict Liability

Strict Liability is a critical legal principle that if you cause harm you are liable. It is liability without proof of fault for an injury caused by a product that is both defective and not reasonably safe. In establishing strict liability, the injured person need only prove:

- The product was unsafe (and therefore defective), and
- The defect caused the injury.

The focus is on the product, not the conduct of the manufacturer/foodservice operator. It does not matter if every possible precaution was taken. If the product was defective, and caused an injury, the provider of the product is liable.

Modern scientific tools such as genetic fingerprinting of organisms makes positive identification of the source of an outbreak possible. Once the source is identified, the operator is liable.

Constructive Knowledge

Constructive Knowledge is another legal principle often invoked in cases of foodborne illness. The law views an operator responsible not just for what he or she actually knows, but what they should have known, discovered or perceived. In other words, ignorance is no defense. If you should have known, the law will assume that you did know. For instance, if an employee spent a vacation in an area where *hepatitis A* is endemic, the operator can be liable under constructive knowledge if the employee causes an outbreak of *hepatitis A*. The operator should know the health risks posed by his/her employees at all times.

Given these two legal doctrines, restaurant operators cannot assume that there are legal defenses available to them if an outbreak occurs. Their best efforts should be focused on the prevention of foodborne illness.

If someone becomes ill as a result of eating food you prepared, liability will almost always attach. However, financial judgements and settlements are also influenced by the degree of diligence or negligence an operator has displayed in their food safety operating practices. Being diligent not only reduces the risk of a foodborne illness outbreak but can also mitigate the financial burden should one occur.

Damages Created by Foodborne Illness

Protect your business from the tsunami wave of foodborne illness



The emotional and financial nightmares that accompany a serious outbreak of foodborne illness impacts you, and your business, immediately and it lasts a lifetime. In many cases businesses are forced to close their doors, if not for financial reasons, then for the emotional impact on owners.

When assessing the damages that a foodborne illness could inflict on your operation consider the impact of:

Sick Customers & Employees

The emotional distress experienced by operators when customers and/or employees die or suffer life-altering disabilities from foodborne illness will often far outweigh the impact of even the most punitive of financial damages. It is a life-altering event.

Loss of Public Confidence

Foodborne Illness is a major news event that becomes public knowledge immediately. A business, and personal reputation, built on trust and confidence over many years is dramatically impacted within hours.

Product Recall

Product recall, reworking, repackaging and disposal activity is a major expense that consumes all functions within an organization. It has an immediate impact on product availability, market presence and cash flow. Many times it also results in a permanent loss of distribution, retail space and retail support.

Lost Revenue

How long can your operation meet its financial obligations with 0% of its current revenue? How long at 80% of its revenue or at 50% of its revenue? When foodborne illness occurs it impacts all products & outlets in your operation and not just the one infected. What actions will you need to take to dramatically cut costs to survive? What impact will these actions have on your business? On the lives of your employees? On your own family?

Lost Market Share

Where will your customers go when your product or service is temporarily unavailable? Will they return when the problem is resolved? Why? What will it take for them to regain confidence in your operations? Can you afford the time and money necessary to rebuild their confidence and trust?

Fines Under the principles of strict liability and constructive knowledge expect to pay damages to your customers and their families. Also expect fines. What will insurance cover?

Closure

Unfortunately, an often occurrence. Sometimes temporary, sometimes forever.

Damages Created by Foodborne Illness

Foodborne illness has left a number of victims. The following are statistics on a few businesses, owners and employees impacted:

foodservice operations

Jack-in-the-Box 1993

- E-coli outbreak
- 4 children died
- >600 sick
- >\$100 million in settlement
- 20% drop in sales across chain
- Still feeling effects

Cecilis BBQ Hut 1996

- Newspaper report of worker with Hep A
- Sales plummet immediately
- Newspaper reports worker NOT sick
- Business closes

Iwau's Deli 1998

- E-coli outbreak
- 5200 sick
- >\$3 million settlement
- Business closed

Subway 1999

- Hep A outbreak
- 31 people affected
- \$1.6 million settlement
- Outlet closed

Crab House 2001

- Hep A outbreak
- Worker-to-worker-to-customer
- 29 sick, 1 dead

Chilis 2003

- Salmonella outbreak
- 13 people hospitalized
- location closed, litigation in progress

Chi-Chi's 2003

- Hepatitis A
- field contaminated green onions from Mexico
- severe financial impact, litigation in progress

Friendly's 2004

- Hepatitis A
- 5000 emergency vaccinations
- litigation pending

producers

Bauer Meat 1988

- E-coli outbreak
- 1 child with HUS
- 38,000 lb. Burger recall
- Company closed
- President commits suicide

Hudson Foods 1995

- 20,000 lb product recall
- Company closed

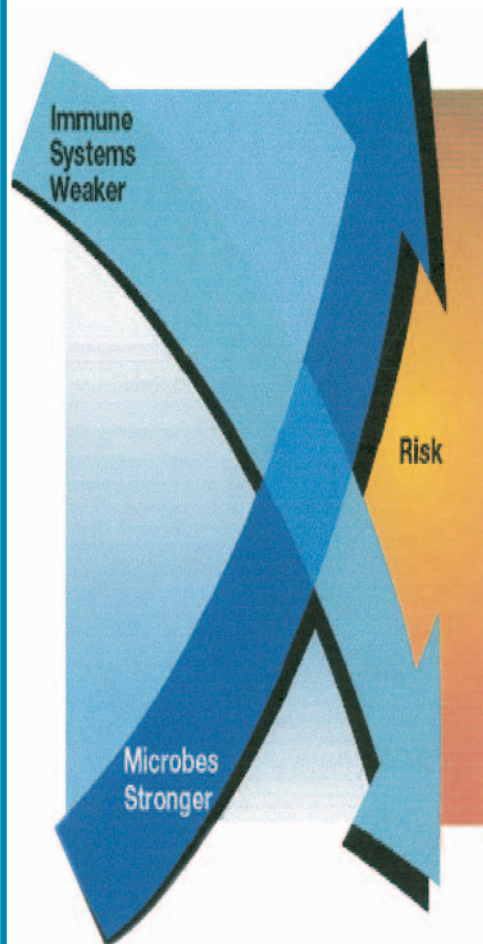
Odwalla Juice 1996

- 1 child dead
- 70 sick
- \$15 million settlement
- \$1.5 million fine

BiMar Meats 1998

- Listeria outbreak
- 21 people dead
- >100 sick
- Across 22 states
- 35 million lb recall of hot dogs

The Science of Foodborne Illness



Microbes: Stronger

Unfortunately, this enemy fights a guerrilla war. In the right conditions (your kitchen) Microbes mutate and evolve at astonishing pace, resisting efforts to control their impact. New information regarding the Bird Flu confirms this disturbing trend. The Invaders chart provides details on some of the more common pathogens that can inflict their damage thanks to inadequate food handling practices and poor hand hygiene.

Customers: More Vulnerable

Unfortunately, as the pathogens mutate to resist our efforts, many of our customer's immune systems are becoming more vulnerable with age, disease and more frequent exposure.

- 20% of the North American population falls into the “highly” vulnerable category — this percentage growing each year as our population ages.
- Global travel creates the opportunity for new pathogens to move rapidly across natural borders.
- The over 50 and traveling segments of population represent a high percentage of away-from-home dining (what is your share of “at risk” customers?)

Regulations: Better Equipped

Combine these increasing risks with the continuing advancement in Trace-back Technology, Science can now, better than ever before, tell us the HOW, WHEN and WHERE of foodborne illness incidents. The “bugs” can hide but the source of infection can't.

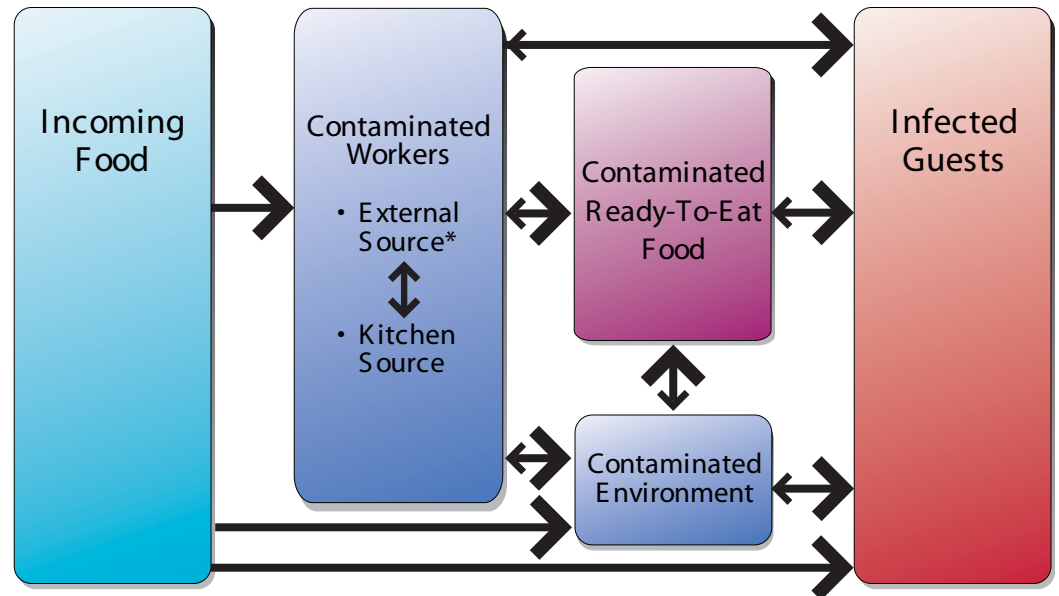
Hepatitis A: Act Now!

Hepatitis A is an infection of the liver caused by the *hepatitis A virus* (HAV). The incidence of infection is increasing with serious implications for customers, employees, managers and owners.
Are you properly managing the risk of *hepatitis A* in your operation?

Science: On Your Side

Fortunately, science is on your side. It tells you a great deal about how, when and where to fight back. Most importantly, research has proven that good handwashing is the most effective means of preventing the spread of foodborne illness.

The Pathogen Pathways



- 1** → Primary Path
→ Secondary Path

2 Note: Up to 20% of Foodservice customers are immune compromised.
(In Healthcare and Pre-school this number approaches 100%.)

*Foreign travel, risky lifestyle, household or food exposure.

Foodborne Illness: Risk Self-Assessment

Good foodservice begins with a focus on the prevention of foodborne illness outbreaks

The best prevention programs start with an understanding of the risk factors that managers control. Managers who understand these risk factors can then set acceptable goals, make informed decisions and actively manage their food safety program — Active Managerial Control.

Customer Assessment:

In the world of foodservice, customers do the choosing. They decide where they eat, what they eat, and when they eat. Their general state of health may be in question when they eat at your location. The simple fact is that on any day the average foodservice operation will have 20% of their customer base in the high risk category for foodborne illness. This means that 20% could be susceptible to severe repercussions, including death, from any illness they contract because their immune system is compromised. It also means these same customers could be unknowingly contaminating your facilities and your staff with pathogens. It is important to understand the inherent risk of your customer base. Knowing this risk can help you make better decisions on menu selection, sanitation processes, hand hygiene frequency and even facility design. The Handwashingforlife Institute (HFLI) customer assessment guide provides a simple means of assessing your customer risk and is the first place to start in determining your overall risk for foodborne illness.

Process Assessment:

When it comes to food safety and personal hygiene every operation and every employee is unique. Good processes and good process management is critical to providing a “Safe Food” environment. Steps can be taken to manage risk at both the individual level and the total operation level. Do you have the proper hand hygiene processes in place? Complete the Handwashingforlife Institute (HFLI) Process checklist to assess your “Safe Hands” policies and practices.

Basic “quick start” Assessment:

The quick start assessment is a paper based approach that facilitates a logical analysis of the most critical factors contributing to the risk of foodborne illness. It utilizes a simplified Higher – Moderate – Lower rating system to categorize the risk of foodborne illness in a foodservice operation. If your assessed risk is in the Lower range then this approach to risk assessment is probably all you need. However, if your risk is Moderate to Higher then completing the electronic Self-Assessment Worksheet (SAW) should be a priority.

Self-Assessment Worksheet (SAW):

SAW is an electronic worksheet to cut through the hand hygiene risk factors. It includes more variables impacting upon the risk of foodborne illness than the “quick start” version allows. It is also interactive allowing managers to test the impact of changes in processes, menus, and hygiene programs on the overall risk level. While still simple to complete, it does require access to a computer and the Internet (or a CD of program). SAW allows managers to take control of the risk factors in their environment to make informed decisions.

To access a working copy of Self Assessment Worksheet (SAW) visit the Learning Center at: www.handwashingforlife.com

The “High Risk” Population

Use the “High Risk” Assessment Chart to establish the customer risk of your operation.

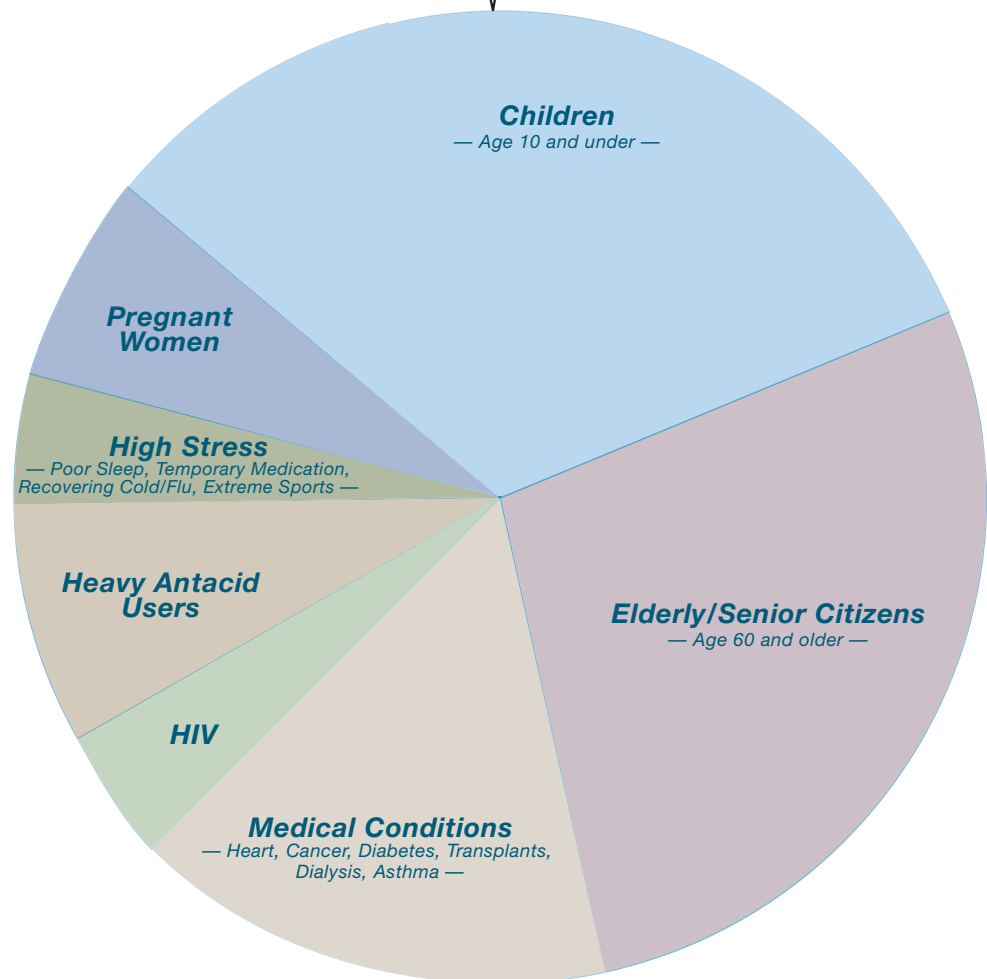
managers guide

1. Select a time of day when your customer count is highest.
2. Count total number of customers seated.
3. Count total number of customers over 60 and under 10 years of age.
4. Double this number.
5. Calculate the percentage of “high risk” customers by dividing the doubled number by the total number of customers times 100.
6. Repeat this exercise for 7 days or 7 different times in 1 day.

Your Customer Risk Level –

If average over 7 readings is:
 Less than 10 lower risk
 10-20 moderate risk
 20 or more higher risk

Total customers served today	<input type="text"/>	<p>Assess The Risk</p> <p>Identify percent of customers who are more susceptible to foodborne illness</p> <p>•</p> <p>Sample counts over one day and estimate weekly average</p>	<input type="text"/>	“Highly Vulnerable” customers served today
	<input type="text"/>		<input type="text"/>	
	<input type="text"/>		<input type="text"/>	
	<input type="text"/>		<input type="text"/>	
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	<input type="text"/>		<input type="text"/>	
	<input type="text"/>		<input type="text"/>	
Total customers served this week	<input type="text"/>			<input type="text"/>



Directional estimates based on U.S.A. population.



Foodborne Illness: Process Assessment Checklist

Does your operation have the following policies and processes in place **AND** are they known and understood by all managers and employees?

Process Assessment:

	Yes	No
Safe Hands Safer Food policy?		
Safe hands hiring policy?		
Ill Worker Exclusion policy?		
Hand Hygiene skill certification for every employee?		
Quantified performance reporting on hand hygiene?		
PIC is trained in Hands-On system of hand hygiene mangement?		
A Calendar of Hand Hygiene staff training events is being followed?		

Scoring:

- Yes answer to 5 or more = **Lower risk**
- Yes answer to 3 or 4 = **Moderate risk**
- Yes answer to 2 or less = **Higher risk**

Quick Start: Risk Assessment

managers guide

Operation Risk:

- Place a number in the appropriate column for each row item as follows:

If (H) place 5 in Higher column

If (M) place 3 in Moderate column

If (L) place 1 in Lower column

- Total the number for each column.

- Total all three columns and insert grand total in "Operation Risk Score" box.

Process Risk:

- Determined on previous page.

Higher, if the Process Factor is 2

Moderate, if the Process Factor is 1.5

Lower, if the Process Factor is 0.5

- Multiply the Operation Risk Score by the Process Risk and insert the result in the "Managed Risk Score" box.

Managed Risk Score Determination:

Over 15 = Higher risk

8-15 = Moderate risk

0-7 = Lower risk

	Higher	Moderate	Lower	
Menu- Food Selection & Sourcing				
Raw animal, fish, shellfish, eggs (H)				
Cooked animal, fish, shellfish, eggs (M)				
Green salads (protein++) (H)				
Non-pasteurized juices, cheese, dairy (H)				
None of the above (L)				
Customers at Risk				
Over 20%, 10-20%, Less than 10%				
(H) (M) (L)				
Food Preparation Complexity				
Very, Moderately, Simple				
(H) (M) (L)				
Temperature Monitoring				
Seldom, Shift Change, Continuous				
(H) (M) (L)				
General Sanitation				
Poor/Fair, Good, Excellent				
(H) (M) (L)				
Hand-Hygiene Policies & Practices				
None, ad-hoc, "Hands-On"				
(H) (M) (L)				
Operation Risk Assessment:				
Column Totals		+	+	=
Operation Risk Score	_____▲			
Managed Risk Assessment:				
Process Risk	[determined on previous page]			
Managed Risk	[Operation Risk x Process Risk]			
Managed Risk Score	_____▲			

Self-Assessment Worksheet Guide

The best prevention programs start with an understanding of:

The risk associated with current practices

The risk acceptable to owners and managers

In this section you can use the “Self-Assessment” worksheet to:

- Measure the level of risk currently being experienced within your operation
- Determine what actions are needed/desired to lower your risk
- Set goals

How to complete the Handwashingforlife Self-Assessment Worksheet (SAW):

Open SAW excel file in the Learning Center tab at www.handwashingforlife.com

It is best to have at least 3 different people complete the worksheet so that different perspectives can be compared.

Open the Excel sheet and click on SAW tab at bottom of worksheet.

Review the content before starting.

It may be easier to complete the worksheet on-site in the kitchen. Print off a copy to facilitate answering the questions on-site. Then return to fill in the worksheet on-line since the program will need to calculate the results.

The blanks to fill in are highlighted in red. Read the comments section for help in filling in the red sections (just type over existing content).

The numbers highlighted in blue are calculated numbers (do not type in these areas).

Print out a copy of the final document for your files and future reference.

How to read the Self-Assessment Worksheet (SAW):

The blue numbers in bold represent your RISK scores related to foodborne illness. A few comments on these numbers:

Every operation will have it's own unique risk based on menu, customer base, facilities, prep process, controls and hand hygiene factors. Changing your input/decision on these variables will impact the level of risk.

The total risk for foodborne illness can never be eliminated but it can be managed.

Total Risk Factor:

The blue number at the bottom of the page is the risk associated with your TOTAL food management program.

note

For simplicity purposes a risk factor has not been included for facilities. Facility constraints certainly contribute to increasing risk for foodborne illness and our facility recommendations are presented under Best Practices. However, we believe good management practices and employee training are the starting point in reducing foodborne illness, regardless of current facilities.