

## FDA Risk Factor Study 1998, 2003 and 2008 comparison

### % Out of Compliance

Risk Factors	1. Food from Unsafe Sources	2. Inadequate Cooking	3. Improper Holding Time/Temper-ature	4. Contaminated Equipment/Protection from Contamination	5. Poor Personal Hygiene	6. Other (Chemical Contamination)	Notes
Hospitals	4.7	2.3	36.2	17.6	17.1	14.6	
Nursing Homes	2.1	9.6	29.2	16.8	16.0	12.5	
Elementary Schools	3.7	11.8	27.5	14.7	14.9	13.4	
Fast Food	2.4	7.4	38.2	17.4	24.2	31.4	
Full Service	12.0	15.4	54.7	35.0	40.9	25.2	
Delis	4.3	9.4	50.8	18.8	20.5	28.4	
Meat & Poultry	2.3	-#	19.9	17.0	6.8	14.1	#low observations
Seafood	11.4	-#	32.5	13.6	8.9	9.6	#low observations
Produce	1.5	-#	34.7	16.1	15.1	10.2	

The highest percentage out of compliance for all 9 types of facilities that were visited was Improper Holding Time/Temperature.

Study also found all 9 types of facilities did not have adequate written employee health policies. All had greater than 50% out of compliance.

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### Data Items in Need of Priority Attention for Each Risk Factor

<b>Risk Factor</b>	<b>Data Items</b>
<b>Food from Unsafe Sources</b>	Shellstock tags retained for 90 days;
<b>Inadequate Cooking</b>	Rapid reheating; poultry, stuffed fish, meat, pasta cooked;
<b>Improper Holding Time/Temperature</b>	cooling; cold-holding; hot holding; date-marking; discarding of foods; time alone used as a public health control;
<b>Contaminated Equipment/Protection from Contamination</b>	Surface/utensils cleaned/sanitized; separation of raw/RTE foods; protection from contamination; raw animal foods separated
<b>Poor Personal Hygiene</b>	Proper, adequate handwashing; handsink convenient/accessible; good hygienic practices; prevention of contamination of hands; handsink, cleanser/drying device;
<b>Other (Chemical Contamination)</b>	Poisonous or toxic materials properly identified, stored and used

## FDA Risk Factor Study

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### Recommendations

For Whom	Task	Including
Industry Managers	Develop and Implement SOPs	Detail monitoring & corrective action for time/temperature control; training should be covered in employee orientation and in refreshers
Industry Managers	Provide necessary resources, equipment, and supplies	Thermocouples, temperature logs, hand soap & towels, chemical sanitizers, test kit
Industry Managers	Verify employees are following monitoring procedures	Daily oversight; provide employees with necessary knowledge & skills
Industry Managers	Identify methods to routinely assess effectiveness of SOPs	Could be based on internal review; regulatory inspections, or third party evaluation; risk factor violations noted during inspections should motivate managers to respond with active managerial control
Industry Managers	Overall – active managerial control over the risk factors	High out of compliance percentages of data items related to handwashing, bare-hand contact with ready to eat foods, time/temperature control, and contaminated equipment indicate needed improvement in those areas
Regulatory Programs	Conduct quality, risk-based inspections	Spend more time observation employee practices – handwashing, food handling, cooling of foods, and clean-up procedures; provide inspection tools; consider alternate working schedules to allow inspections at different times – observe cooling when it is occurring
Regulatory Programs	Providing onsite education and achieving voluntary compliance	Make use of existing training programs; establish open dialogue; obtain immediate corrective action; assist operators with SOPs and risk control plans; develop intervention strategies
Regulatory Programs	Implementing consistent and effective enforcement protocol	Develop procedures and strategies; look for active managerial control over risk factors; ensure credibility by applying enforcement actions uniformly
Regulatory Programs	Continuous program improvement	Self-assessment outlined in Program Standards

*“...it is important to note that the risk factors and data items in need of priority attention remain the same as in previous data collection periods for each of the facility types. This is an indication that more action is needed by the industry and regulatory bodies.” FDA Risk Factor Study, page 150*