

Step 1: Identify Root Causes -- Sub-Issues and Contributing Factors

General Health and Safety Concern:

More employee injuries due to spilled hot coffee over the past six months

Sub-Issue:	Sub-Issue:	Sub-Issue:	Sub-Issue:
Coffee cup/lid error	Design of coffee machine	Employee fatigue	Disorganized work space
Contributing Factors:	Contributing Factors:	Contributing Factors:	Contributing Factors:
<p>Cups are too thin</p> <p>Lid-checks not performed</p> <p>Coffee cup sleeves do not easily fit</p>	<p>Coffee machine does not indicate when it is done brewing</p> <p>Glass carafes dribble when filling orders</p>	<p>Late-night closers often have opening shift next day</p> <p>Average of 4-5 hours of sleep</p> <p>Finding shift coverage not standardized</p> <p>Understaffed during peak hours</p>	<p>Not enough counter space</p> <p>Coffee machine in an inconvenient location</p> <p>Coffee machines too close to food prep area</p>

Step 2: Develop Measurable Objective and Solution Activities

Major Health and Safety Objective:

Reduce the rate of employee injuries as a result of hot coffee spills

Solution 1:	Solution 2:	Solution 3:	Solution 4:
Improve functionality of coffee cups and lids	Improve safety features of coffee machine	Policy changes/education to reduce employee fatigue	Reorganize workspace to maximize efficiency
Specific Activities/ Components of Solution 1:	Specific Activities/ Components of Solution 2:	Specific Activities/ Components of Solution 3:	Specific Activities/ Components of Solution 4:
<p>Order thicker coffee cups/lids with coffee sleeves that fit easily</p> <p>Train employees on conducting lid-checks & safe handling of cups</p>	<p>Purchase coffee machines that prevent splashing, dispense directly to cups</p> <p>Alternative: Purchase: protective splash guard or better carafes that dribble less</p>	<p>Change scheduling and shift coverage policies</p> <p>Provide material on the benefits of sleep/strategies for getting more sleep</p> <p>Have an additional employee during peak hours</p> <p>Convert walk-in closet to an employee quiet/break room</p>	<p>Store infrequently used supplies to clear counter space</p> <p>Hire an ergonomic consultant to reorganize workspace to maximize workflow and usability</p> <p>Separate coffee prep and food prep areas</p>

Step 3: Set Criteria for Selecting and Evaluating Interventions

<p>Scope</p> <p>Who do you want to reach (e.g. one unit or the entire organization)? How many people should be affected? (If you plan a small pilot, describe # in pilot and in long term)</p>	<p>Benefits/Effectiveness</p> <p>What are the positive outcomes you want to achieve? (both short and long term)</p>	<p>Resource Considerations</p> <p>What resources are currently available within the organization that should be considered? (e.g. time, money, personnel) Are there important parameters or context factors to consider?</p>	<p>Obstacles</p> <p>What potential barriers exist that may interfere with intervention success?</p> <p>Do not list cost as an obstacle here.</p>
<p>All coffee servers at this franchise location should benefit from changes being made.</p> <p>It's desirable to make changes that could be adopted by other franchise locations too</p>	<p>SHORT TERM</p> <p>Increased employee satisfaction and less stress</p> <p>Better employee comfort</p> <p>Higher customer satisfaction</p>	<p>Employees semi-annual training can be used to educate on spills</p> <p>Costs for supplies not to exceed 1% over existing budget for sustainability</p> <p>Any remodeling or new equipment installation should not stop service</p> <p>Require a one-time change</p> <p>Design Teams may propose interventions that exceed the resources currently available if the benefits justify the costs. Resources should not limit brainstorming.</p>	<p>Eco-conscious customers want recyclable cups/lids</p> <p>Employees may be resistant to changes in workspace design</p> <p>Implementing scheduling procedure changes may difficult</p> <p>Fear of more workers compensation claims (due to increased awareness)</p>
	<p>LONG TERM</p> <p>Fewer burn injury reports</p> <p>Fewer reports of employee fatigue on annual employee survey</p>		
	<p>Short term examples: Increased knowledge, behavior change, participation, satisfaction</p> <p>Long term examples: Improved health, lower claims/costs, more productive</p>		

Step 4A: Form Interventions Worksheet

Major Health, Safety, & Well-Being Objective (from Step 2)

Reduce the rate of employee injuries as a result of hot coffee spills

Key sub-issues for intervention (from Step 2 – list only the sub-issues that are addressed in interventions A, B, or C)

Coffee cup/lid error; Design of coffee machine; Policy changes/education to reduce employee fatigue; Disorganized work space

Intervention A Title:	Intervention B Title:	Intervention C Title:
Improve functionality of coffee cups and lids	Improve safety features of coffee machine	Reorganize workspace to maximize efficiency
Activities	Activities	Activities
1. Order thicker coffee cups/lids with coffee sleeves that fit easily	1. Purchase a coffee machines that prevent splashing, dispense directly to cups	1. Store infrequently used supplies to clear counter space
2. Train employees on conducting lid-checks & safe handling of cups	2. Purchase protective splash guard or better carafes that dribble less	2. Hire an ergonomic consultant to reorganize workspace to maximize workflow and usability
3.	3.	3. Separate coffee prep and food prep areas
4.	4.	4.
5.	5.	5.

Step 4B: Analyze Activities Worksheet

Solution: Reorganize workspace to maximize efficiency				
Solution Activities	Scope	Benefits/ Effectiveness	Resources Needed	Obstacles
List the activities that you want to include in this intervention	Who will this activity reach? How many people will be affected?	What positive outcomes will be achieved through this activity? (describe both short and long term)	What are the resources needs/costs of this activity? (time, money, personnel)	What obstacles or potential barriers could interfere with the success of this activity?
Store infrequently used supplies to clear counterspace	All employees	- More counter space decreases clutter and spilling	-~2-4 hrs employee planning time -\$100 for storage shelves	-May disadvantage shorter employees
Hire an ergonomic consultant to reorganize workspace and workflow	All employees	-Fewer collisions between workers -Fewer spills -Faster, easier order filling	-\$250/ 1.5 hour consulting fee -Potential cost (?) of new equipment based on assessment	-Managers may worry that consultant will recommend expensive changes
Separate food prep from coffee prep area	All employees	-Fewer claims for burns	-~ \$3,000 for remodeling new food prep area	-Time and hassle of hiring and supervising a contractor -Impact to orders during construction

Step 4C: Apply Criteria for Selecting + Evaluating Interventions

Instructions to complete this form: 1) List the selection criteria from Step 3 in the corresponding column. 2) List the intervention activities in the appropriate row. 3) If an activity meets the selection criteria, place a check-mark in the appropriate cell. If not, leave the cell blank. 4) By looking across rows, you can see how well an activity meets all selection criteria. 5) By looking down columns, you can assess which activities meet a specific criterion.	Scope		Benefits/ Effectiveness				Resource Considerations				Obstacles			Summary		
	All coffee servers at this franchise location should benefit from changes being made.	It's desirable to make changes that could be adopted by other franchise locations too.	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Eco-conscious customers want recyclable cups/lids	Employees may be resistant to changes in workspace design	Implementing scheduling procedure changes may be difficult	Fear of more workers compensation claims (due to increased awareness)	Number of positive selection criteria (scope, benefits/effectiveness, and resource considerations) for an activity	Number of negative selection criteria (obstacles)
Intervention A Activities																
-Order thicker coffee cups/lids with coffee sleeves that fit easily -Train employees on conducting lid-checks & safe handling of cups	✓	✓	✓	✓				✓	✓	✓	✓				7	1
Intervention B Activities																
-Purchase a coffee machines that prevent splashing, dispense directly to cups -Alternative: Purchase protective splash guard or better carafes that dribble less	✓			✓					✓	✓		✓	✓		4	2
Intervention C Activities																
-Store infrequently used supplies to clear counter space -Hire an ergonomic consultant to reorganize workspace to maximize workflow and usability -Separate coffee prep and food prep areas	✓				✓				✓	✓		✓			4	1

Step 4D: Rate Intervention Options -- Design Team

	Intervention A Title:	Intervention B Title:	Intervention C Title:
Rate the three intervention alternatives as High (H), Medium (M), or Low (L) relative to the selection criteria from Step 3.	Improve functionality of coffee cups and lids	Improve safety features of coffee machine	Reorganize workspace to maximize efficiency
Anticipated Scope (L/M/H)	M/H	H	M
Anticipated Benefits (L/M/H)	L/M	H	M
Anticipated Resources Needed (L/M/H)	L	M/H	M
Anticipated Obstacles (L/M/H)	L	M	L
Priority ranking of interventions (optional):			
<p>1.Best option: Intervention B addresses main source of burns -- at the point of the coffee machine. This will have greatest chance of reduction in employee burn injuries</p> <p>2.Intervention C: Could help, but addresses a secondary problem of people bumping into each other</p> <p>3.Intervention A: Least expensive, but may not show results</p>			
Additional notes (optional):			
Consider checking if corporate office resources available to offset costs.			

Step 5: Rate and Select Intervention Options -- Steering Committee

	Intervention A Title:	Intervention B Title:	Intervention C Title:
Rate the three intervention alternatives as High (H), Medium (M), or Low (L) relative to the selection criteria from Step 3.	Improve functionality of coffee cups and lids	Improve safety features of coffee machine	Reorganize workspace to maximize efficiency
Anticipated Scope (L/M/H)	L	H	H
Anticipated Benefits (L/M/H)	L/M	H	M
Anticipated Resources Needed (L/M/H)	L	M/H	M
Anticipated Obstacles (L/M/H)	H	H	L

Topics to discuss with Design Team regarding proposed intervention (optional):

Intervention A: We agree with your ratings for anticipated benefits and resources needed, however we don't think that using thicker materials for our coffee cups fits with our eco-friendly brand. We think it may turn customers away, hence the "high" rating for obstacles

Intervention B: We agree that this intervention may make the greatest impact at reducing injury rates, however it will be difficult to identify an alternative coffee machine design because we have to assure that the quality of coffee is not compromised; such a change may take several months-one year

Intervention C: This seems like a win-win. All employees benefit and the obstacles are quite low

Intervention(s) selected for implementation:

We recommend to proceed with option C; We would like the Design Team to gather more information on available coffee machines so that we can make an informed decision before implementing intervention B; Intervention A would be possible if coffee cups were compostable, as that would align with our brand. We would like to gather more information from the Design Team on compostable cup options if the Design Team feels that it is essential to implement intervention A.