

Lessons Learned from Insurance Perspective for Food-related Recalls and Incidents

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Review of Food-related (Voluntary) Recalls and related incidents

- Types: Physical, Chemical, Micro biological, Allergen
- Focus: 2nd, 3rd Tier Supply Chain
- Insurance coverages available
- Insurance-related Direct Costs
- Uninsurable Enterprise Risk Costs
- General Lessons Learned

Types of Recalls

RECALL TYPE	DESCRIPTION
Class I	A situation in which there is a reasonable probability that the use of, or exposure to, a violative product will cause serious adverse health consequences or death
Class II	A situation in which use of, or exposure to, a violative product may cause temporary or medically reversible adverse health consequences or where the probability of serious adverse health consequences is remote
Class III	A situation in which use of, or exposure to, a violative product is not likely to cause adverse health consequences

Mean cost: \$10M in direct costs, not including brand damage, lost sales

Recall Cost Calculator

Recall Cost Calculator**



1. DEF Bar Co. recalls 285,000 boxes of nutribars, average retail cost \$6/box = \$1,7100,00
2. Notification and Retrieval cost \$293,400
3. Cost to Destroy product: \$100,000
4. Root cause determination: \$35,000
5. Brand Damage /lost sales \$6,000,000
6. Reputational Damage: \$3,000,000
7. Est Total = \$11, 138,400

Insurance Coverages Available

- Commercial Property Coverage - For the loss to be covered, the food must qualify as insured property and the damage must result from a covered cause of loss at an insured location. Mold, bacteria, some contamination excluded
- Coverage will apply only if business shutdown results from physical damage by a covered peril to property at your premises. Income you lose due to a shutdown caused by contamination of food with bacteria or mold is not likely to be covered.

Food Contamination Endorsement – Coverage

- Expenses to clean equipment as required by the governmental authority
- Cost to replace food actually or suspected to be contaminated
- Costs of medical tests and vaccinations for employees (unless these costs are covered by workers' compensation insurance)
- Loss of business income beginning 24 hours (or more) after you receive the notice of closure
- Additional advertising expenses incurred to restore your firm's reputation
- Covered expenses are subject to an annual aggregate limit. No coverage for government-imposed fines or penalties.

General Liability Coverage

- If you are sued by customers for illnesses contracted from contaminated products, the claims should be covered by your company's general liability insurance. A general liability policy automatically covers product liability claims. The policy covers claims for bodily injury or property damage that occurs from your premises if the product is no longer in your physical possession.
- If your business sells food products that are consumed on your company's premises, your insurer should add an endorsement called Products/Completed Operations Redefined to your liability policy. This endorsement eliminates the requirement that bodily injury or property damage occur away from your premises to qualify as a products-completed operations loss. The result is that claims for illnesses contracted from food eaten on your premises will be covered as products-completed operations losses, not premises-operations losses.

Product Recall Endorsement

- Although a general liability policy excludes costs associated with a product recall, some recall costs can be covered via an ISO endorsement called Limited Product Withdrawal Expense Coverage.
- The endorsement can be expensive but will reimburse you for certain expenses you have incurred if a product has been recalled due to a real or suspected defect or tampering. The product defect or tampering must have caused (or be expected to cause) bodily injury or physical injury to tangible property.

Limited Product Withdrawal Endorsement

- No coverage for claims by third-parties for expenses they have incurred to withdraw your contaminated product from the market.
- For example, suppose Cathy's Blue Mill supplies artisan wheat flour to a local bakery.
- You discover that a batch of flour you sold was contaminated with sawdust.
- You notify the bakery, which is forced to withdraw 3000 loaves of bread it sold that contain the tainted flour. If the bakery sues you to recoup the costs it incurred to recall the bread, the damages will not be covered by the endorsement.

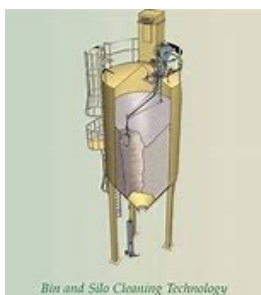
Contaminated Products Coverage

- The endorsements described cover only some of the risks associated with contaminated food. Broader coverage is available under contaminated products policies. These policies can be expensive but they are designed for manufacturers or distributors of products that may sicken consumers if they become contaminated. Examples are food (including pet food), pharmaceuticals, cosmetics, and herbal supplements.
- Contaminated products policies aren't standardized so coverage varies from one insurer to another. Policies typically cover first-party recall expenses and damages arising from third-party claims. Coverage is often initiated by the accidental contamination (including mislabeling) or malicious tampering of the insured's product. Malicious tampering is usually a defined term. It generally means the intentional alteration or contamination of a product that causes it to be dangerous or unfit for its intended use.

Contaminated Products – Coverage by Cause of Loss

- Damages resulting from third-party claims
- Defense coverage for third-party claims
- Product recall costs
- Cost of destroying or disposing of contaminated products
- Loss of value of contaminated products
- Loss of income and extra expense
- Product extortion costs
- Cost of hiring a crisis management/PR consultant
- Cost of rehabilitating your company's brand to restore customers' confidence

Physical Contamination – Bronze in Sugar



- Bin Whip used to remove "heel" in bottom of sugar silos
- Fiber whip with magnetic tracer can be screened out
- Crew tried bronze chain as a "whip" without consulting with QA (did not wear out so fast)
- Bronze ended up in sugar
- Non detectable by rare earth magnets
- Entered supply chain
- Retrieved all before customers used sugar in final product
- Recall Cost: \$500,000 (1999)

Lessons Learned – Physical Contamination

- Management of Change – lack of documentation of processes
- QA program – authority to make changes in process not clear in push for line workers to be involved in Quality Improvement Statistical Process Control improvements
- Risk Management not involved – did not know of scope and loss potential
- Reputational Risk – not considered

Physical Contamination – Causing Microbiological Growth – Faulty Packaging Fitment

- Fruit concentrate liquid bag fitment failed
- Mold developed
- \$2.5M in voluntarily recalled product
- Supplier was sued and our insured recovered subrogation
- \$5M in lost sales (not insurable)
- \$5M in reputational damage (no insurance)



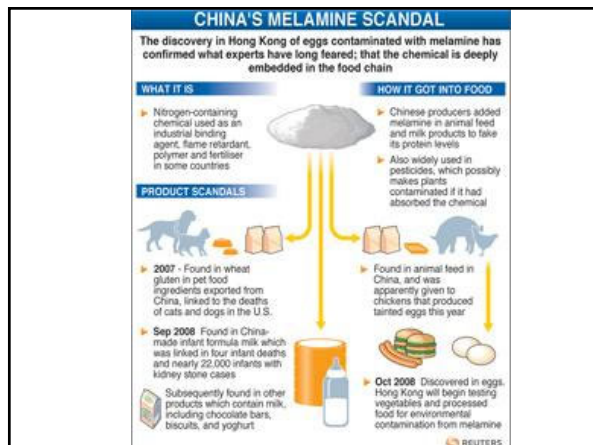
Lessons Learned - Faulty Fitment

- Fail small—try pilot projects with new hardware, packaging, lids etc. before rolling out across an entire line of food products
- Have a rigorous documented Hazard Analysis program in place for all aspects of a product and its packaging
- Document packaging testing and MTBF – avoid concentrating solely on product to exclusion of transport, environment/storage, stock throughput risks

Chemical Contaminant Case - Melamine

- Mimics protein under analysis – cheap
- Third tier supplier in China (2007-08) to small animal feed ingredient division in Asia (my client)
- Client formulated “mineral pacs” for pet food
- ~200 pet deaths reported (for client)
- Valued at \$5000 x 200 = \$1M
- Lost sales ~\$5M
- Reputational risk-loss ~\$5M
- Non-renewed for recall insurance





Lessons Learned – Chemical Contamination

- Moral hazard to be assessed by Country
- 3rd party QA audits only as reliable as people doing/managing them
- True cost for 2nd, 3rd tier supplier system failure must be assessed / quantified(exposures and controls)
- Reputational Risk needs to be assessed and quantified in food product safety

Micro biological Contamination – Sunflower seeds

- ABC Edible Seed Processor
- **Incident (2016)** Voluntary recall of roasted sunflower seeds due to Listeria Monocytogenes contamination. No illnesses or deaths reported. Product sold for use by other product formulators manufacturing 100s of types of bars, snacks, mixes and finished food products. Multiple secondary recalls.
- **Root causes of the contamination:** Roasted sunflower seeds apparently contaminated after roasting at 300 deg F (kill step). Listeria is killed at 165 deg F. Environmental monitoring program (EMP) monitoring for indicator organisms using field test kits did not pick up Listeria as an early warning. Additionally, product testing of Listeria prior to release of product was not completed in one partial batch that was released into commerce stream.

Food borne outbreaks - microbiological

- In 2003 Chi-Chi's restaurant went bankrupt and closed their doors in North America permanently due to a hepatitis A outbreak.
- Not allowing an employee enough time off work to recover from an illness is expensive. One model estimates giving a restaurant employee a week off to recover can cost an anywhere from \$78 to \$3,451 depending upon his/her wages and duration of illness. But a single norovirus outbreak, cost a casual restaurant \$2.2 million. HR benefits matter!
- One listeria outbreak in fast food / casual restaurants can cost ~ \$2.5 million in meals lost per illness, lawsuits, legal fees, fines and higher insurance premiums for a 250-person outbreak. Listeria outbreaks in fine dining restaurants, average \$2.6 million in costs.

Microbiological Contamination – cont.

- **Direct losses:** 1% of ABC's annual sales = \$25M loss (primary and secondary product recall and related expenses)
- **Indirect Non insurable losses:** reputational damage in lost sales ~ \$50M or more.
- Unrecognized enterprise risks exposed. CEO and a few key executives pursuing other opportunities.

Lessons Learned – Sunflower seeds

- Expand EMP areas to include areas after kill step areas, increase frequency of finished product sampling to minimize impact of product loss should lab tests come back positive. Improve plant sanitation based on EMP results.
- **Impact:** in event of positive result for contamination instead of disposing \$6M in product for 24 hours of production, a firm can increase product sampling frequency with statistically significant sampling rates so that < 6 hours of production would be destroyed or \$2M – although sampling and labor costs will increase 400% the ROI is substantial (and reputational / lost sales / enterprise risk reduced)
- **Result:** ABC chose to implement improved positive release sampling program with shorter time window throughout all facilities. EMP area early warning program expanded to Zones 1,2,3,4 with many more samples and improved trend analysis.

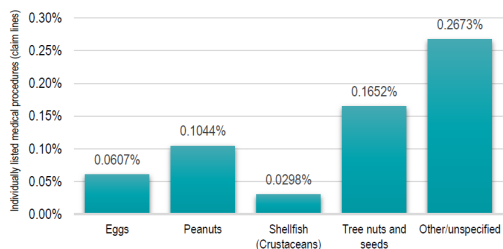
Allergens – Cross Contamination

- Private insurance claim anaphylactic food reactions rose 377 % from 2007 to 2016, (FAIR Health, a national, independent, nonprofit organization that collects and analyzes data on healthcare costs.)
- Peanuts most common specifically identified food causing anaphylaxis, accounting for 26 percent of claim lines with anaphylactic food reaction.
- Tree nuts and seeds followed closely at 18 percent. A
- Egg allergies 7%
- Crustacean allergies 6%
- Dairy allergies 5%,
- "Other" 33%

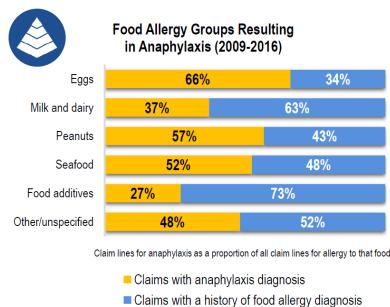


Washington State Food-related Claim Analysis

Top Five Foods That Cause Anaphylactic Reactions (2009-2016)



Focusing Exposure and Hazard Analysis



Allergen – Walnuts for Almonds

- My client Catered non-profit fundraiser
- Chef substituted walnuts for almonds for salad
- Impact: Victim was volunteer who went into anaphylactic shock
- Total claim: \$987,000 - self insured retention was \$1M



Lessons learned - Allergens

- For any ingredient substitution have a management of change procedure
- Have QA technical review and sign off for even smallest ingredient change
- Accurate labelling is key – and incomplete allergen labelling the cause of many voluntary recalls

Bottom Line

- Insurance coverage is limited for food related losses
- Probably only covers 50% of all costs
- Prevention and Organization-wide Food Safety Culture
- Hazard Assessment (What if, Why/Why, Fishbone etc.) should be more widely practiced
- Near misses are organization wide learning process improvement opportunities

Questions?

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