



Food Safety Summit Conference & Expo

Home Delivery – Coming of Age

*Rosemont, Illinois
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Home Delivery – Is it Really New?



Like our stores, Food Safety is an evolutionary process



Is this Service Really New?

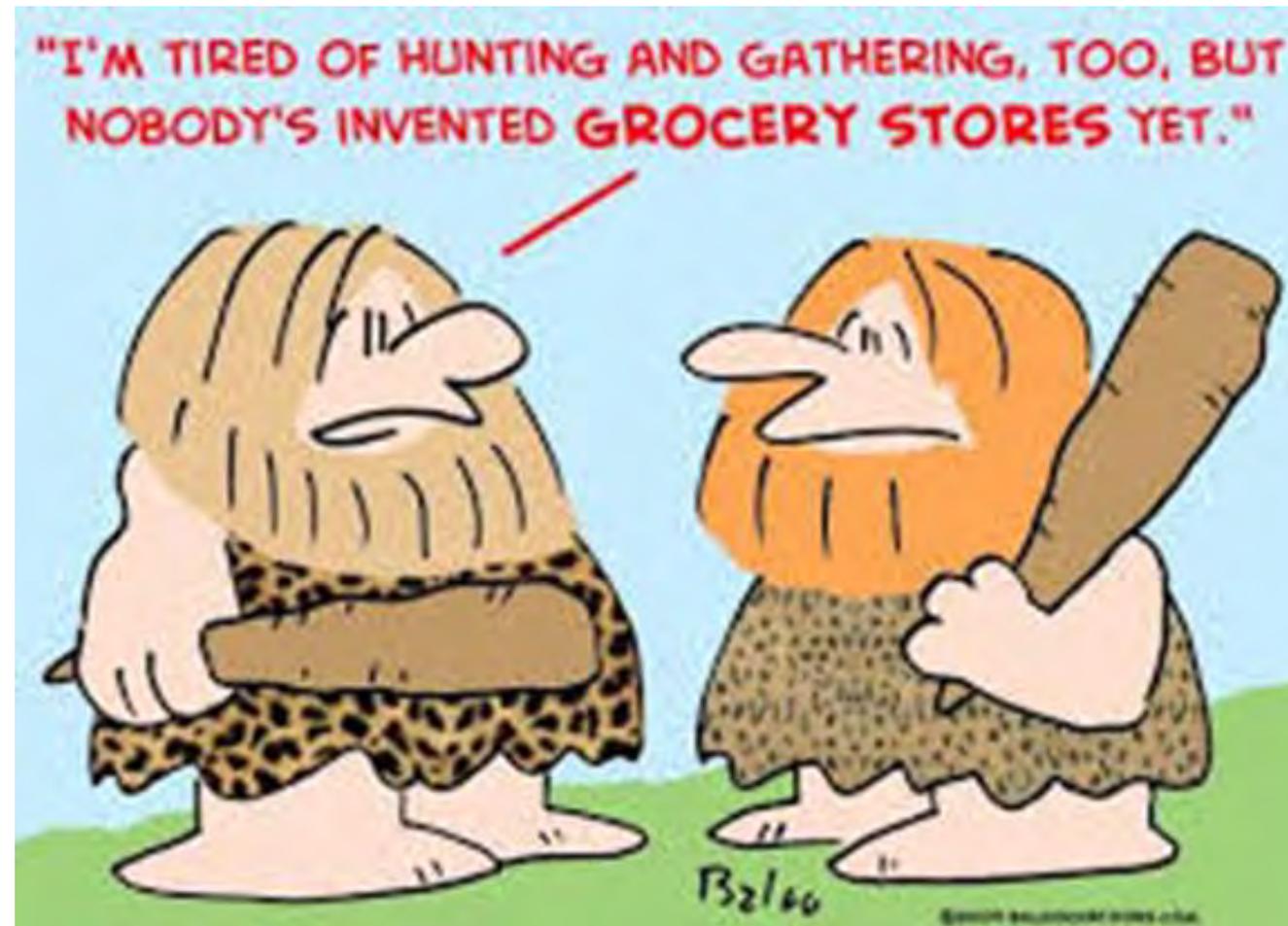


“If we can treat people right, shopping becomes a pleasure...”

-Fred Meijer



Local food deliveries have been around for years



Home delivery is nothing new

- *Grocery shopping was a way to connect with community*
- *Increased fresh high quality foods led to personal preferences*
- *Two wage earning households time starved - balance work, family and chores*
- *Digital devices gain wide acceptance and ease of use*
- *Online ordering becomes more of the norm - trusted*
- *Order to store and pick-up services – fill-in orders*



September 2016

- *Meijer pilots Shipt Home Delivery across 25 stores in the Detroit Market*
- *Set new record for memberships prior to launch with 2,000*
- *Created 500 new jobs*

Meijer & Shipt

- *\$99 Annual and \$14.99 Monthly memberships*
- *Access to 55,000 products across Foods, Drug & Consumables*
- *Same day delivery in as little as one hour*

- *Convenience for time-starved consumers – 2 hours/week*
- *You decide delivery time within 1 hour time window*
- *Ability to schedule deliveries 24 hours a day 7 days a week in some areas*
- *In as little as 20 - 60 minutes*



What happens if the internet breaks down?



Food Safety Concerns to Consider



- *Customer trust in Retailer*
- *Shoppers are independent contractors – must be trusted*
- *Food safety knowledge & training of shopper: cleanliness, product knowledge, cross contamination, temperature control, etc.*
- *Speed of delivery from store to home 10 – 20 minute Shipt target*
- *Insulated bags and or coolers for transport*



Food Safety is Deliberate

***It doesn't happen by
accident***

- *Retailers need to keep their eyes wide open*
- *Customers are looking for convenience*
- *What guidelines do the service providers have in place to insure safe wholesome product?*
- *Outsourcing to a service is not the same as saying we have no control over the customer experience*
- *We're all looking to meet and exceed our customers needs*



Safe Food - It's just good business



RUTGERS
THE STATE UNIVERSITY
OF NEW JERSEY



*Food Safety Risk Factors Associated with
Home Delivery of Meat, Game, Poultry, and
Seafood Products*

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TSU / RU Collaborative Study

□ USDA-funded study that:

- Surveyed **1,002 U.S. consumers** about their experiences and expectations.
- Examined food safety information on **427 domestic vendor websites** and examined their delivery policies.
- Measured delivery and food safety parameters of **169 shipments** of these items.
- Examined **684** products from these shipments for the presence of indicator organisms and specific pathogens.
- Examined the food safety information included with these shipments.
- Provides recommendations for consumers and the industry to improve food safety.

Background



Online sales of meat, poultry, game, and seafood products with home delivery are growing.



Background

More than **500** US online vendors offering raw meat, poultry, game and seafood products with direct delivery to consumers using FedEx[®], UPS[®], and the USPS[®].

There are few barriers to entry to the market

Key Findings

About 1 in 10 Americans purchased or received perishable meat, poultry, game or seafood from an online purveyor in 2014

- Customers perceive little risk
 - 84% satisfied with the quality of the products they received
 - 95% believe that receiving fresh or frozen products delivered by a package delivery service is safe



Concerns

Parcels containing perishable foods are treated no differently than any other package handled by FedEx[®], UPS[®], or USPS[®].

Concerns

Packages must maintain proper cold temperatures on their own

FedEx[®] warns that

“... Highs can reach 140°F (60°C) in closed, parked carrier vehicles during the summer in southern climates.”



Problems with *Signature Release*

Only 5% of 427 vendors studied specifically require a signature upon delivery

- Packages may be left outside for long periods, which can result in temperature abuse



Hallman, W. K., Senger-Mersich, A., & Godwin, S. L. (2015). Online purveyors of raw meat, poultry, and seafood products: delivery policies and available consumer food safety information. *Food Prot. Trends*, 35, 80-88.

Question of Liability

- FedEx® and UPS®:
 - **Disclaim responsibility** if the perishable products become spoiled or damaged during the delivery process
 - It is the vendor's responsibility to ensure that their perishable goods reach their customers safely

Yet,

- Vendors often disclaim responsibility
- They make it difficult for consumers to report problems or to receive refunds

Food Safety Information on Websites

- Only 42% provided any food safety information
- Info was difficult to find
 - Most (22%) listed food safety instructions under an FAQ tab on their main page.
 - Only four (1%) explicitly used the term “food safety.”
 - Other terminology used on tabs:
 - “Customer Service,” “Shipping,” “Recipes,” “About Us,” “Seafood Facts,” “They’ve arrived.”

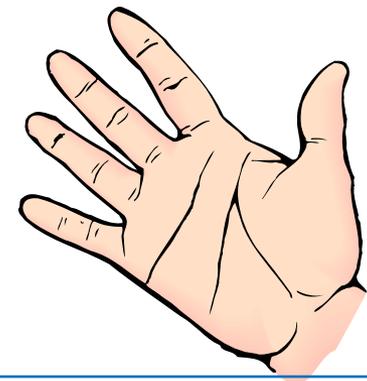


Much of the Information was Inaccurate

“Cool to the touch”

“Your bison meat may be thawed by the time it gets to you. Touch the meat and if it is cool to the touch your order is in good condition.” (Gunpowder Bison)

“Yes, it is safe to eat the meat as long as it is cool to the touch, according to USDA standards.” (Exotic Meats USA)



Types of Food Ordered

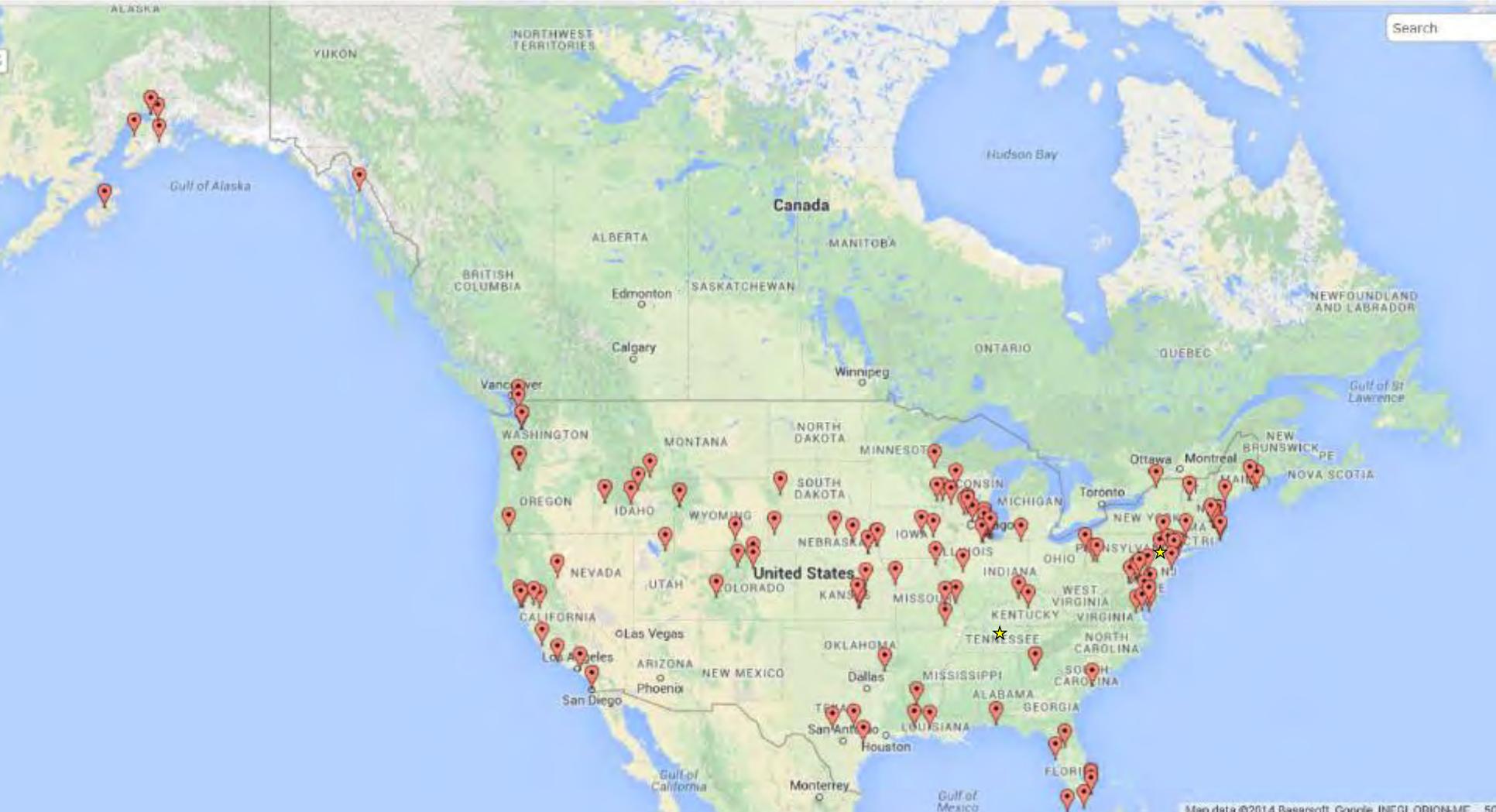
Samples of raw meat, game, poultry, and seafood were purchased online from 160 US purveyors between January and October 2013, and shipped using common carriers to NJ and TN.

Overall, 169 shipments were received and 684 food items tested:

- 271 meat
- 39 poultry
- 133 game
- 235 seafood
- 6 other products



Vendor Shipping Locations



Shipping & Delivery

Packaging integrity

Almost all of the packages arrived intact (93%).

- Six packages showed slight external damage
- Six different packages showed signs of leakage:



Shipping & Delivery

63% lacked Dunnage



Shipping & Delivery

Coolants

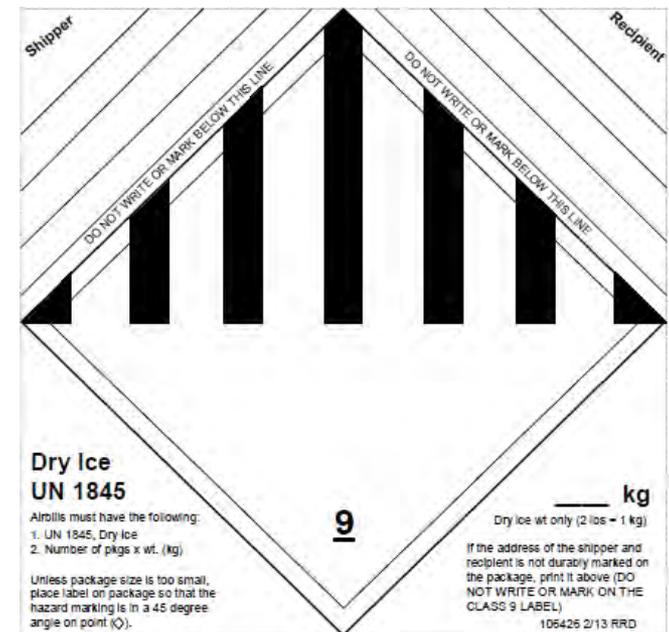
- The majority (56%) contained gel packs.
- 42% contained dry ice.
- 2% included conventional wet ice.



Shipping & Delivery

Dry ice – 72 packages

- Less than half (43%) had dry ice label
- Only a third (36%) provided information on safe handling and disposal.
- This lack of labeling might pose a health risk to consumers – Dry ice can cause severe skin damage upon touch.



Delivery Temperatures

➤ Ten temperatures were taken for each product in a prescribed pattern:

- 5 on top: Center, N, E, S, W
- 5 on Bottom: Center, N, E, S, W



✓ Arrival temperatures ranged from -23°F to 75°F

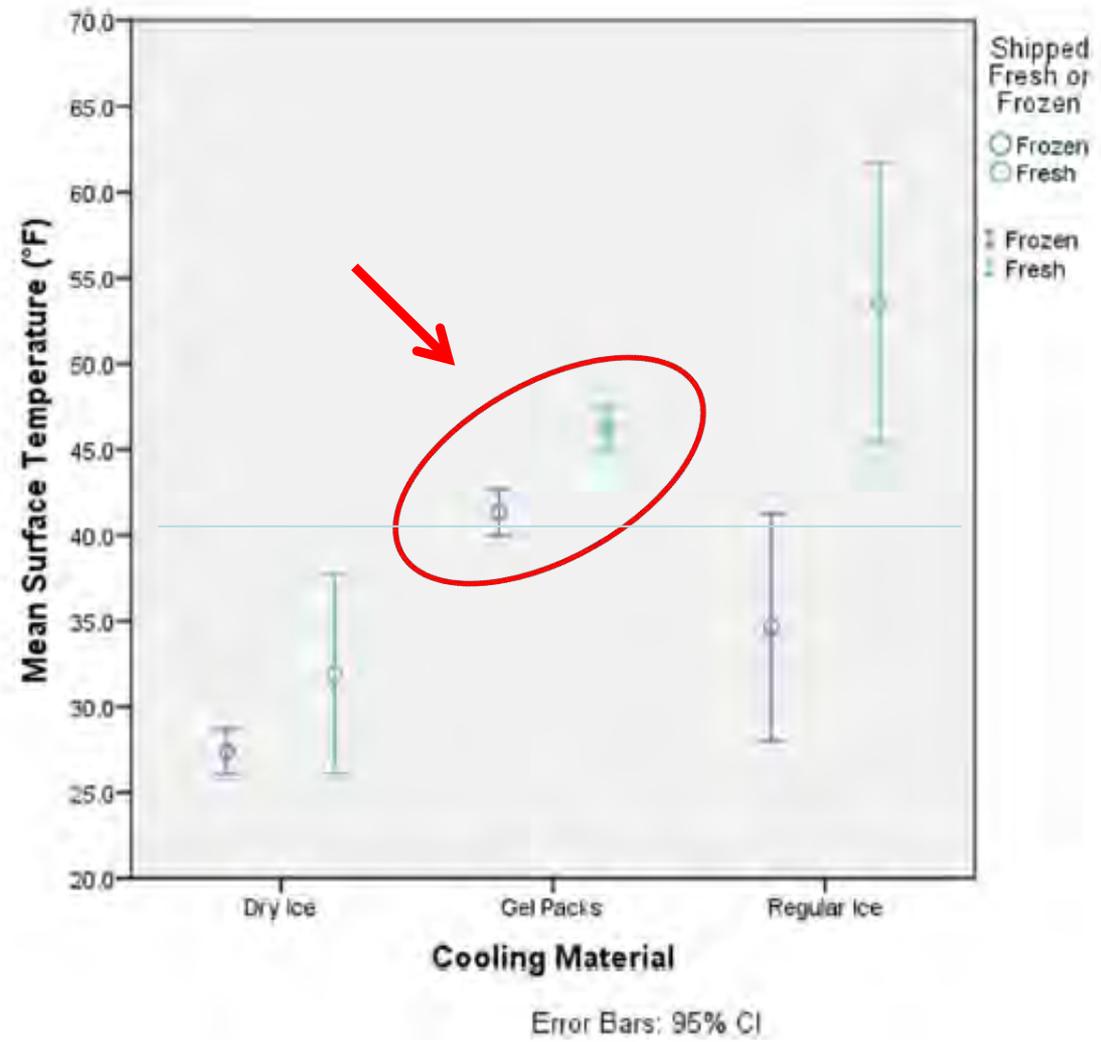
- Surface temperatures varied significantly:
 - among products in the same shipment
 - even at different locations on the same product
- These variations are largely attributable to the type of coolant used and the proximity of the coolant to the product

Delivery Temperatures

Nearly half (47%) of the 684 products arrived with a surface temperature **above 40°F!**

Cooling Capacity

Gel packs were clearly **inferior** to dry ice in keeping perishable products below 40°F



Other Problems

Pieces of nuts in bottom of box



Other Problems

Crushed dry ice - no dry ice label



Other Problems

Unlabeled Products



Other Problems

Potentially Mislabeled Products

Filet mignon (?)



Conclusions

Bottom Line:

- ❑ In this study, almost half of the 684 samples arrived in the danger zone and should be considered unsafe to consume.

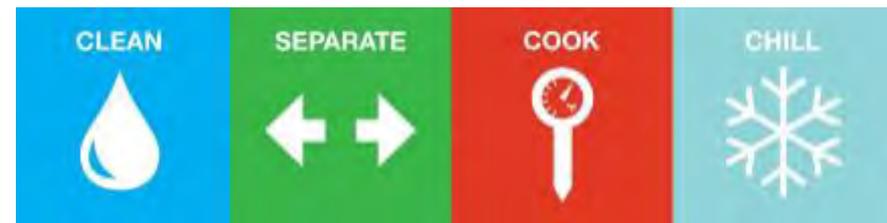
- ❑ But:
 - ❑ Consumers don't perceive this risk
 - ❑ They aren't expecting it
 - ❑ They aren't looking for it
 - ❑ Vendors sites and packages lack food safety information
 - ❑ Many provide unsafe advice
 - ❑ Packages lack appropriate coolants, dunnage, and labeling
 - ❑ Delivery companies *and* vendors disclaim liability
 - ❑ Vendors often make it difficult for consumers to report problems or receive refunds
 - ❑ There are few barriers to entry into online sales of these products

Policy Recommendations

- Online vendors of these products should be required to:
 - Be registered and have a unique ID number
 - Add sensors to packages to alert customers when contents exceed safe temperatures
 - Pass an online course on best packaging practices
 - including the proper amount and type of coolants to be added to packages
 - Provide accurate food safety information along with their shipments
- Resolve the liability issues
 - Shippers and shipping companies should be responsible for spoiled/damaged products – not consumers

Industry Recommendations

- Food safety information should be easy to find on vendors' websites
 - It should be displayed either on the home page (i.e., first page), or with the individual food products sold
- Include information in package concerning the proper handling of the product to ensure safety and customer satisfaction.
 - Make this information obvious in packaging
- Check the accuracy of food safety information



Industry Recommendations

- Package products anticipating “worst case” conditions
 - Expect transit delays
 - Realize that temperatures during transit may be extreme
 - Expect that for packages delivered “signature release” perishable products may:
 - be further exposed to extreme temperatures after delivery
 - remain un-opened for 8 or more hours



Industry Recommendations

Ensure that the shipping container, dunnage, and coolants used are sufficient to keep the product at a safe temperature.

- Choose containers of an appropriate size
- Use appropriate dunnage:
 - To protect the contents from being damaged
 - To reduce the amount of air that needs to be cooled
- Pre-chill/freeze the products before packing
- Calculate the type and amount of coolant necessary
 - Gel packs performed poorly in our study
- Make sure that the coolants are placed properly

Packaging Perishable Shipments With Gel Coolants



Industry Recommendations

- If using dry ice as a coolant, be sure to include warnings and handling instructions for the consumer on both the outside and inside of the shipping container.



Industry Recommendations

- Urge consumers to contact the company if they have any questions or concerns about the products they have received.
 - Make this prominent.
 - Provide a toll-free phone number that is easy to locate in delivery materials and on the company website.
- Develop reasonable reimbursement policies.
 - Make them clear and easy to follow



Moving Forward

- Direct marketing, sales, and delivery to consumers of perishable meat, poultry, game, and seafood is a large and growing business
- Shipping perishable items directly to consumers can be safe if done correctly
- Government, industry, academia, and consumer organizations need to work together to improve the food safety of these products

For More Information:

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