

TOP 6 HAZARDS OF CHEAP DISPOSABLE GLOVES

Why the False Economy of Cheap Disposable Gloves Can Affect Food Safety & Increase Business Risk
- Barry Michaels

1

GLOVE FAILURES AND MANUFACTURING INCONSISTENCIES

Glove manufacturers can reduce costs by using cheap raw materials which lower glove strength, flexibility and durability, increasing the rate of glove failure. Cheap raw materials may also introduce toxic compounds – including known endocrine disruptors and potassium cyanide to glove users and food products.

During manufacturing, wash tanks are expensive to run. Factories may use fewer wash tanks to reduce cost, leading to chemical impurities on and inside gloves – causing chemical migration to food and irritants to users.

Distributors often purchase from different manufacturers, with different chemical formulations – leading to inconsistent quality. Your glove color may still be blue but all else might be different.

Supplier consistency is essential for reliable food safe glove quality, performance and transparency.

during use. Numerous studies have shown vinyl gloves have an increased permeability to bacteria and virus, increasing the risk of cross contamination for both the glove users and the food they are handling. Up to 50% of vinyl glove raw materials are made up of plasticizers which can contain inexpensive phthalates and BPA to reduce costs. Phthalate plasticizers can be absorbed through worker's skin and quickly contaminate food products. Adverse health effects of exposure to BPA and phthalates in US food and occupational settings is estimated to result in \$175 billion in healthcare costs.

Experts believe that transfer of *Listeria monocytogenes* in meat, poultry and seafood plants occurs post-cooking via gloves or clothing.

A single foodborne outbreak associated with a large food processing or food service entity can result in monetary damages of many millions, to even billions of dollars depending on the size and scope of the outbreak and how it affects the value of the brand or company stock.

2

CONTAMINATED FOOD, PRODUCT RETURNS AND BRAND REPUTATION RISK

Gloves have been identified as factors in cross-contamination associated with food handling in food processing plants and in food service venues.

A study of bacterial contamination of disposable gloves prior to use showed 90% of the gloves carried environmental bacteria before being touched, and 10% carried skin commensals, potentially an indicator of factory cleanliness!

Glove studies have shown that 50% - 96% of glove punctures go undetected by wearers. A single glove hole can release tens of thousands of bacteria from overly moist internal glove surfaces and glove fragments can and do end up in food.

Vinyl gloves have a poor resistance to stretch and elongation leading to poorer fitting gloves with more holes occurring

3

GLOVE WASTE AND DISPOSAL COSTS

Glove waste and disposal costs are a significant cost to any business, commonly increased unnecessarily due to:

- A high rate of punctures, rips and tears. If cheaper raw materials are used during manufacturing, glove strength and flexibility are compromised, (increasing the rate of glove failure) causing glove usage to increase.
- The use of thicker gloves, believed to be more durable and cost effective. The opposite is true if manufactured from cheap raw materials. Glove strength is highly proportional to the quality and choice of raw materials

The financial impact of employees needing to change gloves because of poor glove quality is often not counted as downtime and impact on productivity, and should be factored into the overall cost and worker productivity of the business.

4

RISK OF HAND INJURY - MEDICAL AND OCCUPATIONAL COSTS

Occupational skin diseases (OSD) are the most common non-trauma related occupational illness accounting for approximately 13.5% of all occupational illnesses. It is estimated that 1.87 million American workers suffer from OSD each year at a total annual cost of up to \$2 billion.

The hand was the most common site affected by OSD, with protective gloves found to be the most common primary cause. Food workers with OSD on sick leave take longer to return to work than in other professions.

40% of all worker's compensation claims involve problems related to exposed skin, 65% of those involve hands or upper extremities with 25% of those workers affected missing 10 to 12 days of work each year.

To reduce the risk of skin irritation and workers comp claims, good quality gloves meeting improved standards for low chemical and toxic exposure should be used.

5

REDUCED WORKER AND WORKPLACE EFFICIENCY

Poorly fitting gloves reduce dexterity and tactile sensitivity, resulting in a need to use stronger muscle force, leading to the chance of injury. Food companies can experience major costs and significant productivity losses due to injuries related to glove use.

Eagle Protect supplies certified food safe* disposable gloves and clothing to protect your food, your business, your staff and your customers.

**Eagle products are single-sourced, Fingerprint Checked (FPC) and lot certified safe to ensure manufacturing and product consistency.*

6

EMPLOYEE TURNOVER COSTS DUE TO MUSCULOSKELETAL DISORDERS (MSDS)

Work-related musculoskeletal disorders (MSDS) currently account for one-third to one-half of all occupational injuries and illnesses and \$15-20 billion in workers' compensation costs each year.

Increased glove resistance, bulkiness and reduced flexibility (due to poor quality raw materials) can cause injuries including repetitive fatigue and contact trauma on fingers and thumbs, due to extreme finger-thumb force movements required. The median time away from work for repetitive motion MSDS associated with grasping, holding, carrying or turning objects other than tools was 17 days.

\$90 million in indirect costs (hiring, training, overtime and administrative costs) are incurred annually in the US for these musculoskeletal disorders. In the meat and poultry industry the cost of training and equipping a new employee is between \$1,500 and \$4,500 per employee.

*This information summarizes an excerpt from the **Glove Hazard Analysis & Mitigation Strategies Research Study** conducted by Barry Michaels. For more information visit www.eagleprotect.com.*

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