

## Wholesale Distribution Industry



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This study reflects on information derived from insurance claims. These claims form a database that can be analyzed to determine the many and varied causes of loss. CNA Risk Control presents this study of specific CNA claims and industry trends. We begin with a review of exposures inherent to the wholesale distribution industry and conclude with suggested practices to manage these risks.

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## Wholesale Distribution Industry Defined

The wholesale distribution industry serves to move goods/products from the manufacturer to the retail distributor, another wholesale distributor or the exporter. According to the *U.S. Industry and Trade Outlook® 2000*, published by The McGraw-Hill Companies and the U.S. Department of Commerce/International Trade Administration, wholesale trade sales are approximately \$3.2 trillion with approximately 300,000 distributors in the United States. These statistics do not include retail distributors or online merchants.

The supply chain is the cornerstone to the distribution cycle as it ties raw material supplies to the final customer delivery items. As a result, pricing of goods and Lean processes for storage and retrieval are imperative. To handle warehouse activities, software programs are used for functions such as inventory controls, shipping and receiving, accounting, client management and bar-coding, i.e., the application of computerized UPC codes to track inventory. While technology has enabled an increase in productivity and reduction in repetitive tasks, this industry remains labor intensive and requires enormous property space which, ultimately, can lead to staging and racking exposures.

Note: Warehouse space can be leased and/or leased out to other companies, adding potential exposures.

For the purposes of this study, wholesale distributors are defined as:

- Metal dealers/distributors – non structural
- Plumbing supplies and fixtures dealers/distributors
- Non-durable goods distributors
  - o Art
  - o Clothing
  - o Pet supplies
  - o Novelties
- Food and drink distributors (excluding liquor)
  - o Packaged frozen food
  - o Dairy products (excluding dried or canned)
  - o Meat and meat products
  - o Poultry and poultry products
  - o Fish and seafood products
  - o Confectionery
  - o Fresh fruits and vegetables
  - o Groceries and related products

## Wholesale Distribution: An Analysis of Loss Exposures in the Wholesale Distribution Industry

Wholesale distribution companies face traditional loss exposures, such as employee injuries, automobile accidents, liability claims and property losses. In addition, since many of the distribution processes are electronically stored, there are unique exposures related to bringing in manufactured products from overseas along with network protection security,

The following is a review of exposures based on an analysis of claims incurred by wholesale distribution companies insured by CNA between January 1, 2004, to December 31, 2007.

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## Workers' Compensation Claims

### *Top Five Incidents Causing the Injury, Shown as a Percentage of Total Claims*

<b>Incident Type</b>	<b>Percent of Total Claims</b>
Manual Material Handling - Lifting	30%
Struck By/Against	27%
Slips/Trips/Falls	11%
Caught In On Or Between	6%
Exposure To/Contact With Mold/Fumes	4%

### *Top Five Incident Types, Shown as a Percentage of Total Claim Dollars*

<b>Incident Type</b>	<b>Percent of Total Claim Dollars</b>
Manual Material Handling - Lifting	32%
Struck By/Against	17%
Slips/Trips,/Falls	25%
Vehicle Accident	10%
Falls	9%

### **Manual Material Handling - Lifting Incidents**

Although forklifts are used to transfer goods from the trailer to the warehouse and goods within the warehouse, there is manual material handling. Claims data reveals losses from manual lifting of stacks, bundles, rolls of raw materials, and finished products of various shapes, sizes and weights.

Lifting is associated with back and shoulder injuries involving excessive bending, twisting and reaching for product as in the picking process, and trailer unloading. Excessive and inefficient material handling reduces productivity and business profits.

### **Struck By/Against and Caught in/Between Incidents**

Fractures and crushes were the most common injuries followed by contusions, lacerations, pinched body parts and bruises. These incidents were most often associated with racking systems, pallets, lack of cargo securement, especially when unloading the trailer, and objects falling onto a body part.

### **Exposure to/Contact with Incidents**

Wholesale distributor employees are exposed to incidents of fumes, irritants to the skin and eyes, and hearing loss. Frostbite incidents are associated with external weather conditions and working inside coolers.

### **Vehicle Accidents**

The top five loss leaders from the auto liability incidents are found similar to employees who work for wholesale distributors. See the auto liability section.

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## Slips, Trips and Falls Incidents

As would be expected there are many loss causes for slip, trip and fall incidents. The most common causes including tripping over objects, spills on the floor, climbing into/out of a trailer and/or forklift truck and unfavorable weather conditions such as rain, ice or snow. Injuries include: contusions, twisting foot/ankle, fractures and broken bones, back strains and sprains.

## Property Claims

### *Top Five Incidents Causing the Loss, Shown as a Percentage of Total Claims*

<b>Incident Type</b>	<b>Percent of Total Claims</b>
Theft	20%
Wind Damage	19%
Water Damage	14%
Burglary-Loss Of Property	11%
Fire	6%

### *Top Five Incident Types, Shown as a Percentage of Total Claim Dollars*

<b>Incident Type</b>	<b>Percent Of Total Claim Dollars</b>
Wind Damage	47%
Fire	18%
Water Damage	11%
Theft	7%
Burglary-Loss Of Property	5%

## Theft of Goods

Distribution centers have high concentrations of product that is arranged for easy transportation. Add the fact that many of these items are consumer goods of a high desirability to the public and you can understand the exposure. Product may typically be moved with the lift trucks already in the building and may be loaded on to trucks already on site. Strong security measures including locks lights and alarms systems are the best defense against these types of losses.

## Fire Incidents

The trend in distribution is to store closer and higher, maximizing volume and minimizing floor space. Improvements in material handling systems enabled this change. Additionally, the introduction of plastics both in the product and packaging systems has lead to an increase in fuel loads and presents a challenge to any extinguishing efforts. The net effect of changing storage arrangements is to increase the combustible loading in a building and the potential for a large fire. Ignition sources include lift trucks, hotwork operations, electrical sources such as metal halide lighting, and storing materials too close to heaters. Sprinkler systems have improved over the years and are capable of handling the change in storage arrangements.

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## Wind and Water Damage

Warehouses are typically larger buildings, have large roof areas and are susceptible to damage from catastrophic events. The claim data for this study includes the period when major hurricanes hit Florida and Louisiana. The data points out the susceptibility of warehouse buildings to damages from high winds, water, and leaking roofs. Roof maintenance, along with a periodic inspection program, can help to control these types of losses. Additionally, when roofs are replaced, selection of roofs that meet the wind exposures for the geographic areas can lead to better performance and potentially longer life.

## Auto Claims

### *Top Five Incidents Causing the Loss, Shown as a Percentage of Total Claims*

<b>Incident Type</b>	<b>Percent of Total Claims</b>
Rear-ended Other Vehicle	15%
Backed Into Claimant	10%
Struck By Object	9%
Struck Parked Car	9%
Failed To Observe Clearance	8%

### *Top Five Incident Types, Shown as a Percentage of Total Claim Dollars*

<b>Incident Type</b>	<b>Percent Of Total Claim Dollars</b>
Rear-ended Other Vehicle	24%
Lost Control Of Vehicle-Left Road	8%
Failed to Yield	6%
Changed Lanes	5%
Failed to Observe Clearance	5%

Since 2004, auto liability claims have been consistent with the top five incident types. These incidents are often created by inattentive driving and/or inadequate defensive driving. In-cab behaviors such as eating, drinking, cell phone use, smoking, radio distractions and completing paperwork affect the driver's ability to prioritize driving actions.

A few claims noted a comment about the age of the driver. Aging drivers can be affected by reduced vision, reaction time as seen in braking reaction time, and range of motion as seen with tight tendons and/or poor muscle condition which lead to limited movement. An example is the inability to completely turn the head/neck required for "checking the car's blind spot" prior to making a turn or moving in reverse. Factors with aging may impact auto liability exposures.

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## General Liability Claims

### *Top Five Incidents Causing the Loss, Shown as a Percentage of Total Claims*

<b>Incident Type</b>	<b>Percent of Total Claims</b>
Damage Not Otherwise Classified	20%
Struck By	15%
Eating/Drinking	12%
Slip/Trip-Fall On Level Or S/T No Fall	10%
Fire/Explosion	10%

### *Top Five Incident Types, Shown as a Percentage of Total Claim Dollars*

<b>Incident Type</b>	<b>Percent of Total Claim Dollars</b>
Struck By	41%
Fire/Explosion	16%
Slip/Trip-Fall On Level Or Slips/Trips No Fall	9%
Damage Not Otherwise Classified	7%
Advertising Injury	7%

While the claims data did not show foreign made product losses, there is vulnerability in today's global marketplace for products that are brought into the United States but manufactured overseas. It is almost impossible to recoup product liability losses from overseas' manufacturers, especially costs associated with a recall of a foreign made product. As a result, wholesalers and distributors must take an aggressive approach in protecting their assets from product liability actions.

### **Struck By Incidents**

Deliveries involve customer interface with the warehouse employees who are retrieving goods from the racks and driving forklift trucks. In 2007, an increase of claims occurred from truck drivers being struck by the warehouse employees while engaging in conversation or inattentive behaviors. A few incidents were associated with insufficient lighting.

### **Slip and Fall Incidents**

Distributors suffer from these incidents similar to other manufacturers. Causes for these accidents include:

- Lack of slip resistance on walking surfaces
- Poor visibility
- Wet or oily surfaces
- Spills on the floor
- Inattentive behaviors

A few claims show that drivers slipped and fell while entering and existing from the trailers. Associated causes could be related to wet or icy conditions or the method in which drivers got into or out of the trailer truck.

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## **Trip Incidents**

Trips happen when the foot strikes an object which can lead to loss of balance and perhaps a fall. A review of the claims data showed that trips were a result of:

- Obstructed view
- Poor lighting
- Cluttered walkways
- Uneven walking surfaces

## **Eating/Drinking Incidents**

Product liability claims were cited from eating/drinking. A few were noted to cause personal illness. The majority of the claims stated that the product ingested contained a foreign object which resulted in a broken tooth.

## **Advertising Incidents**

While the claims data for advertising incidents was small with only 7 percent of total incurred claims dollars, the majority of claims are associated with patent, copyright or trademark infringement. These claims can only be avoided with a strong product liability program.

## **Suggested Practices**

Implementation of comprehensive safety programs address employee safety and the safety of others that may be affected by the company's operations. A safety program is key to reducing workers' compensation, general liability, auto liability and property losses in the wholesale distribution industry. CNA offers risk control bulletins for wholesale distributors on various safety topics for these insurance lines such as Cargo Securement, Non-Owned Automobile exposure or Slips, Trips and Falls.

## **Boot Camps for Wholesale Distribution Industry**

Managing losses begins with learning about your company's unique risks and how they impact your insurance. CNA's Boot Camp addresses industry loss drivers from a safety and industrial practice viewpoint. Understanding loss drivers can help proactively manage risks through loss prevention, risk transfer and insurance coverage. If a loss occurs, be prepared to properly investigate and handle it.

## **Dock Safety Series (Includes Safety Training and Checklist)**

Loading, unloading and moving materials/goods from trucks are daily activities for distribution of capital equipment manufacturers. Performing these tasks inefficiently or in an unsafe manner can result in serious accidents. These accidents affect the trailer transporter, the dock receiver/loader and any person within the dock area. Dock accidents can affect several insurance coverages, depending on who is insuring the person and/or property. As a result, it is extremely important to understand the legal relationships, i.e., responsibilities between the business entities with personnel and equipment in the dock area.

CNA has developed a safety series for dock work. Through several technical risk control bulletins and School of Risk Control Excellence classes, manufacturers can make effective decisions about equipment, processes within the facility, available space and the safety of the work environment. If an accident should occur, managers will be prepared to properly investigate the scene, the personnel involved and the insurance coverage affected.



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## Workers' Compensation

### Manual Material Handling

Manual material handling injuries are the major loss leader. An ergonomics program can protect workers from these types of injuries and increase productivity. CNA's ErgoPRO is a six-step ergonomic process that provides the knowledge, work method techniques, engineering guidelines and information required to integrate the human factor with the overall production process. CNA's "Motion is Money" process takes the subject to the next level by directly relating ergonomic concepts to measurable improvements in productivity and profitability.

### Forklift Truck Safety

Forklifts and pallet trucks are powered industrial trucks used by capital equipment manufacturers. Employee injuries and property damage can result from unsafe operating procedures, lack of knowledge of the safety rules, lack of enforcement of the safety rules and insufficient training. The National Institute for Occupational Safety and Health's (NIOSH) investigations of forklift-related deaths show that many workers and employers may not be aware of the risks of operating or working near forklifts and are not following the procedures set forth in OSHA standards, consensus standards, or equipment manufacturer's guidelines. CNA offer several risk control bulletins and classes on forklift safety.

### Slips and Falls

Housekeeping programs use visual controls to show problems at a glance. CNA has used Lean principles to implement visual controls and create a culture for housekeeping. CNA's Housekeeping Program uses the 5S housekeeping approach of Lean manufacturing to increase the chance of doing the right thing and decrease the chance of doing the wrong thing.

- Sort** – maintain workplace organization for all items
- Set to Order** – keep orderliness by having items in their "right spot"
- Shine** – maintain cleanliness...don't let clutter and debris get in the way
- Standardized cleanup** – set procedures that are efficiency and consistency
- Sustain** – discipline all employees to complete housekeeping all the time.

In addition, manual handling and storage zone procedures should be established. The United States Department of Labor – OSHA has established worker procedures for handling, moving and storing goods. Refer to the OSHA publication cited in the resource section to obtain answers to the following questions:

- What should your employees know before moving, handling, and storing materials?
- What are the potential hazards for workers?
- What precautions should workers take when moving materials manually?
- What precautions should workers take when moving materials mechanically?
- What precautions must workers take to avoid storage hazards?
- What safeguards must workers follow when stacking materials?

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## Auto Liability

Fleet safety is an essential part of any business' safety program. Understanding the basics of fleet safety is the foundation. A fleet management program should cover the following areas: hired/non owned vehicles, personal use of company vehicles, negligent entrustment, substance testing, and handling driver performance with maturing drivers. CNA offers a training series called the Fleet Institute with topics that address usage of commercial vehicles, driver selection, accident reporting, inspection/maintenance procedures and cargo securement.

## Property

A program for managing property risks is crucial in the prevention and mitigation of potentially catastrophic property losses. Property protection programs include emergency response plans, self-inspection procedures and maintenance of fire protection systems with control of ignition sources.

## Emergency Response Planning

Plans need to be in place to respond to developing situations, such as windstorms, earthquakes and floods. The plans should encompass immediate action taken to minimize damage with well thought-out plans that can return the company to full production.

Together, these plans provide processes to recover from disruptions related to risks that may be natural, technological or human in nature. These plans serve to minimize interruptions to operations that may cause loss of business income and liability claims related to damage to property of others, loss of data of others and interruption of product delivery to customers.

## Theft/Vandalism

The extent of physical security measures depends largely on the type of facility, the value and quantities of material to protect, and the areas where materials are used or stored. There are three controls to reduce theft/vandalism: Modifications to building structures, lighting and storage left in vehicles.

## Lighting

Properly installed and maintained interior and exterior lighting will help guard against unnoticed entry.

- Exterior – Lighting should be provided within approximately 20 feet of all entry doors. Dark and obscure areas of the property (such as back and side doors, windows, and other points of access) should be lighted if vulnerable and not visible from streets or highways.
- Interior – Lighting should be provided in areas easily visible the street and passing traffic.
- Exterior Yard Storage – Adequate area lighting should be provided when target materials, equipment, or vehicles are stored on the property.

## Storage in Vehicles

Storage of high demand articles in loaded vehicles overnight should be strongly discouraged. If it is unavoidable, the following minimum protection guidelines apply.

- Vehicle doors and windows must be locked when not in use.
- Keys must be removed.
- Yard trailers that contain stock storage (whether hitched or unhitched) must have substantial locks over the kingpin of the trailer hitch.

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- Tractors parked on the premises should be disconnected from the trailers. Ignition keys must be removed and doors locked.

CNA offers a variety of resources for the management of property risks. These tools include guides and bulletins on emergency response planning, property protection and guidelines addressing both physical security and information risks.

### **General Liability/Product Liability**

CNA has created a product liability prevention program with a complementary School of Risk Control Excellence class. Topics covered include effective organization of the program, design review techniques, creation of effective warnings, labels and instructions, quality control procedures, sales and advertising review techniques and recordkeeping requirements.

Wholesale distribution depends on information for planning, retrieving, storing and distributing goods. Although claims data did not show network security claims, there are potential losses for distributors. Examples of losses that may occur include:

- Software or a programmer that deletes or damages data in a customer's system. Damages could include costs to recreate system, extra expenses to operate without data, and other lost income associated with data lost.
- Software or programming that functions improperly, miscalculating numbers. Damages could include losses from calculating improperly, lost income and extra expense from operating without the software itself.
- Software, programming or hardware systems that fail to function, bringing operations, such as credit card processing, telephone call routing, data processing, or manufacturing operations, to a halt. Damages could include lost income from downtime and extra expenses incurred in trying to operate with a work-around.
- Systems integration project that encounters significant delays due to unexpected incompatibilities between the customer's legacy systems and new applications and hardware specified by the systems integrator (damages include significant interruptions to the customer's core business operations, causing lost income)

To help manage these losses, CNA offers NetProtect, a product for first- and third-party information risk coverage for network security, media liability and privacy liability protection, along with coverage for a range of regulatory exposures. In addition, CNA offers Technology Services with a School of Risk Control Excellence class addressing emerging threats to the electronic components supply chain. With this training, distributors will be able to understand threats that impact their inventory control systems and just-in-time warehousing practices. In addition, companies will be more prepared for handling events such as infrastructure disruption, breach of customer data and component failures.

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## School of Risk Control Excellence

### Courses applicable for the Wholesale Distribution:

- Accommodating the Maturing Driver** – Highlights how age impacts driving and what safety measures can be adopted
- Building Your Business Continuity Plan (BCP) – Building Your Business Continuity Plan (BCP)** – Covers elements necessary in a BCP strategic plan to help restore and keep critical business functions going within the first 72 hours of a disaster
- Controlling Equipment Theft** – Identifies ways to control equipment theft and mitigate the associated risks
- Dock Safety Cargo Securement — Dry Van** – Covers how properly securing cargo affects your customer relationships and profitability
- Dock Safety Cargo Securement — Flatbed** – Identifies how to avoid costly claims and improve customer satisfaction through proper flatbed material handling
- Dock Safety Overview** – Identifies overall risks of dock work, the lines of insurance that can be affected, and controls to put into place to minimize these exposures
- Drug and Alcohol Prevention** – Identifies ways to properly manage the work risks and legal issues of drug screening with pre-employment, post-accident, reasonable suspicion and random testing
- FallPRO** – Outlines steps for implementing a comprehensive fall protection process for the leading cause of fatalities in the construction industry
- Fire Protection, Inspection, Testing and Maintenance** – Discusses NFPA 25 requirements for inspection, testing and maintenance of fire protection systems
- In-Cab Behaviors** – Introduces the human factors concept of addressing vehicle accidents
- Incident Investigation** – Identifies causes that can lead to incident investigation steps
- Infrared (IR) Thermography** – Explains the science behind IR, potential benefits that can help reduce costs by reducing losses
- Lower Back Pain and Manual Material Handling** – Covers symptoms, characteristics and risk factors that contribute to the development of lower back pain
- Manage Chemical Health Risks to Protect Your Employees and the Company's Liability** – Explains the effect that chemicals in a product might have on the health of employees
- Privacy and Computer Network Security Risks** – Provides participants tools and resources to effectively recognize and manage computer network risks
- Risk Transfer** – Addresses the importance of developing a risk transfer strategy
- Warehousing – Controlling Your Property Exposures** – Analyzes sprinkler systems to help make informed business decisions to maximize the ability of the fire prevention system
- Wholesale Distribution Boot Camp** – Addresses industry loss drivers from a safety and industrial practice viewpoint

To find out more about these classes, go to: [www.cna.com/riskcontrol](http://www.cna.com/riskcontrol)

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