WAREHOUSE SAFETY AND SECURITY

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• Expected Outcomes
  – ....
Warehousing Operations

• Efficient and effective warehousing management can be a tough task
• Workforce motivation can be difficult because the work can be:
  – Repetitive in nature
  – Strenuous and physically demanding
  – On occasion dangerous
Important Operational Issues

- Warehousing productivity analysis
- Safety considerations
- Hazardous materials
- Warehousing security
- Cleanliness and sanitation issues
Warehousing Operations

• **Warehousing productivity analysis**
  – Productivity is a measure of output/input
  – Numerous productivity metrics can be used to assess warehouse productivity, but not all are relevant to all facilities
  – Examples of representative measures include:
    ▪ Cases shipped per person
    ▪ Product lines shipped per person
    ▪ Pallets shipped per person
    ▪ Average warehouse capacity used
    ▪ Forklift capacity used
    ▪ Stock accuracy
Warehousing Operations

• Safety considerations
  – Warehouses, distribution centers, and cross-docking facilities can be dangerous workplaces
    • Fatality rate in warehousing is higher
    • Warehouse safety can be influenced by governmental regulations
    • Standards have been set for warehousing equipment and operations and are enforced by OSHA
  – Warehouse safety categories include:
    • Employee
    • Property
    • Motor vehicles
• Hazardous materials “hazmat”
  – Examples include:
    • Explosives
    • Flammable liquids
    • Flammable solids
  – Government regulations often require shipping documents indicating the hazardous materials
  – Government regulations require the use of safety data sheets (SDS)
Warehousing Operations

• Warehousing security
  – Example potential threats include:
    • Theft
    • Pilferage
    • Heat and humidity
    • Vandalism
    • Fire
    • Loss of electricity
  – Focuses on protecting products and preventing their theft
Warehousing Operations

• Cleanliness and sanitation issues
  – Particularly important in many industries, such the food service industry
  – Can have a positive impact on employee safety, morale, and productivity while also reducing employee turnover\(^1\)
  – Requires common sense and due diligence
Safety Cues

• Visualization - using electronic boards provide workers and supervisor critical information
• Information board are positioned through the materials handling and assembly to alert employees or management of important information's.
• Example: In a facility, employees work within assign area groups. Each group select particular song that plays when the need arises to alert employees and management of a problem experienced by the work group. When the song is broadcast, everyone knows where in the production process the problem lies
Types of Cues

- Visual Types of Cues
- Audio Types of Cues
- Touch Types of Cues
- Odor Types of Cues
1. Visual Types of Cues
   – Something than can see - seeing clearly within warehouse space
   – Example: fluid on the floor or indicate mechanical issue with the forklift, leaking packaging may cause contamination of other products

2. Audio Types of Cues
   – Something that we can hear - hearing clearly within warehouse space
   – Example: loud machinery could signal a mechanical issue may indicate an emergency, horns indicates presence of other vehicle

3. Odor Types of Cues
   – Something smell of unfamiliar odors - smelling of unfamiliar odor within warehouse space
   – Example: Smoke or gas that indicate of explosive or fire hazards.
Safe Picking and Replenishment

1. Divided location according to activity (picking and replenishment).
2. Creating a reserve picking process - help warehouse operators to position inventory and workers in a particular area only.
3. Filling orders and loading trailers which an active area is located near the shipping dock to facilitates the efficient movement of products for shipping.
4. Replenish operators should be the only product handlers moving product from reserve area to packing area.
5. Training specific operators to perform one activity may help to maintain safety, workers and products.

6. Become familiar with product location and their sensory cues should increase when something goes wrong.
Safe Product Staging

1. Staging are handle inbound and outbound shipment and loading dock can have different types of products and quantities at one time.
2. Traditional drivers for carriers are required to inspect and count the freight they received.
3. Unfamiliar with facility, dock process and safety may create another issue
4. Strategies to improved safety :
   – Loading activity carry out by warehouse operators itself
   – Design a safe and secure drop trailer program (loading activity during off-peak hours) so safety and efficiency is maximized both drivers and warehouse operators
Safe Product Staging

– Using RFID tag technology for product handling within the warehouse- improve safety is achieved when product no longer has to be counted by checkers, lift operators or truck drivers.

– Simplified the staging process would seek to remove the delay at staging process

– Refined shipping process would allow forklift drivers to travel direct from storage location to a trailer.
1. Warehouse environment bring together people, product and machinery and due to this it is critical to understand the factor impacting the safety and security of product within the workplace.

2. As a warehouse operators, need to secure product from:
   - Pilferage and Theft
   - Damage
   - Fire and Water
   - Infestation
1. Safety and security of product and personnel often requires separation through physical means

2. Physical security measure includes but not limited to:
   1. Gate/ fenced to isolate between imported goods with other goods
   2. Automatic opening and closing doorways
SAFETY AND SECURITY

Example safety guidelines to help keep warehouse safe:

1. Ensure Safety Equipment is Used at all Times
2. Eliminate Any Potential Safety Hazards
3. Clearly Label Designated Hazardous Zones
4. Always Use Safe Lifting Techniques
5. Provide Training and Refresher Courses
6. Promote Awareness in your Warehouse
EXAMPLE SIGNAGE

- **CAUTION**
  - Watch for forklift traffic

- **CAUTION**
  - Watch for lift trucks

- **Pallet storage area**

- **On the job safety begins here**

- **Safety first**
  - Lift with your legs not your back

- **Shipping and receiving**
Conclusion of The Chapter

- Conclusion #1